

CITY OF MELBOURNE.



REPORT OF HEALTH COMMITTEE

FOR THE

YEAR ENDED 31st DECEMBER, 1944.

Adopted by Council on 9th July, 1945.

RCB 23,9

P.T.O for Contents

	THE ROYAL SANITARY INSTITUTE LIBRARY	
	90, Buckingham Palace Road London, S.W.I. Class No. RCB 23 Acc. No. This book is returnable on or before the last date Marked below.	
	M 5 DEC 1948	
REPORT OF HE		1
REPORT OF JO HEALTH		FICER OF
REPORT OF HE		E 9
REPORT OF HI		SES 13
REPORT OF M		3 21
REPORT OF Me		31
REPORT OF P		ERIOLOGI-
CAL LABO		32
10.5		

CITY OF MELBOURNE.

ROYAL SANITARY INSTITUTE

LIBRARY REGULATIONS

- 1. Books may be borrowed by Fellows, Members and Associates personally or by a messenger producing a written order. The person to whom books are delivered shall sign a receipt for them in a book provided for that purpose.
- 2. Books may be sent through the post, or by some equivalent means of carriage, upon a written order. All charges of carriage to the Institute shall be defrayed by the borrower.
- 3. A borrower may not have more than three volumes in his possession at one time.
- 4. A borrower will be considered liable for the value of any book lost or damaged while on loan to him, and if it be a separate volume, for the value of the whole work rendered imperfect.

Marking or writing in the volumes is not permitted, and borrowers are requested to call attention to damage of this character.

5. Books may be retained for 28 days. Periodicals may be retained for 14 days. Applications for extension of the loan period must be made in writing before its expiry. No book may be kept longer than 3 months.

New books will not be lent until after the expiration of one month from the date of their having been received by the Institute. The current number of a periodical may not be

borrowed.

6. Borrowers retaining books longer than the time specified, and neglecting to return them when demanded, forfeit the right to borrow books until the volume or volumes be returned, and for such further time as may be ordered.

and for such further time as may be ordered.

Any borrower failing to comply with a request for the return of a book shall be considered liable for the cost of replacing the book, and the Council may, after giving due notice to him, order the book to be replaced at his expense.

No volume may be reissued to the same borrower until at least seven days have elapsed after its return, neither may it be transferred by one borrower to another.

- 7. Books may not be taken or sent out of the United Kingdom.
- 8. Volumes returned through the post must be securely packed in a box, or otherwise protected.

Parcels should be addressed:

THE ROYAL SANITARY INSTITUTE, 90, BUCKINGHAM PALACE ROAD, LONDON, S.W.1.

MITTEE

1944.

REP

CONTENTS.

REPORT OF HEALTH COMMITTEE	1
REPORT OF JOHN DALE, O.B.E., M.D., B.Sc (Public Health) MEDICAL OFFICER OF HEALTH	4
REPORT OF HILDA E. KINCAID, D.Sc., M.B., B.Sc, UPON CHILD WELFARE	9.
REPORT OF HILDA BULL, B.Sc., M.B., D.P.H., UPON INFECTIOUS DISEASES	13
REPORT OF Mr. T. G. O. JORDAN, MR.S.i., CHIEF HEALTH INSPECTOR	21
REPORT OF Messrs. DUNN, SON AND STONE, CITY ANALYSTS	31
REPORT OF PROFESSOR HAROLD A. WOODRUFF, DIRECTOR OF BACTERIOLOGI-CAL LABORATORY, UNIVERSITY OF MEBOURNE	32

CITY OF MELBOURNE



REPORT OF THE HEALTH COMMITTEE FOR THE YEAR 1944.

MEMBERS OF COMMITTEE

Councillor Townsend (Chairman)
Councillor Boulton
Councillor Brens
Councillor Coleman
Councillor Holland
Councillor E. L. Morton

The Health Committee submits, for the information of the Council, a report regarding the work carried out under the directions of the Committee during the year ended 31st December, 1944.

REPORTS OF OFFICERS

A report by the Medical Officer of Health (Dr. John Dale) upon the work of the Health Department during 1944, and upon the health of the inhabitants of the City generally is attached hereto, together with reports by Dr. Hilda E. Kincaid upon child welfare work, by Dr. Hilda Bull upon infectious diseases, by Mr. T. G. O. Jordan, the Chief Health Inspector, on the routine work of the Department, by Messrs. Dunn, Son and Stone, City Analysts, and by Professor Harold A. Woodruff, Director of the Bacteriological Laboratory, University of Melbourne. Full details of the various health activities of the Council are contained in these reports.

CHILD WELFARE

The health of the children has again been good, and it will be seen from Dr. Hilda Kincaid's report that the outstanding feature of the year was the low infant mortality. The death rate of infants for the Metropolitan area with over one million inhabitants, was 31.05, comparable with Cities such as Detroit and New York. The infant mortality rate for the City of Melbourne, whose residents include a high proportion of relatively under-privileged people, was 32.02, which is only slightly higher than the average for the Metropolitan area.

In accordance with the authority given by the Council, the Hopetoun Free Kindergarten and Creche, was erected at the corner of Racecourse Road and Victoria Street, Flemington, at the estimated cost of approximately £9,300 including equipment. This building, which will cater for 65 children and has been designed to accommodate ultimately 100 children, is the second Kindergarten erected by the Council in the City of Melbourne, and is much appreciated in the Flemington district where an enthusiastic local Committee, under the chairmanship of Councillor C. T. Smith, is successfully undertaking the management of the kindergarten.

The Committee has under consideration plans for the erection by the Council of modern kindergartens throughout the residential portions of the City on the lines of those established at North Melbourne and Flemington, in order to cater for the large number of existing and future pre-school children in those closely settled areas. The health and happiness of the community at large can be materially influenced by early care of young children, and the importance of this work has been further manifested by war-time ravages of family and home life.

It is gratifying to record that the State Government last year gave further encouragement to the development of child welfare work by granting subsidies to bodies conducting approved kindergartens. These subsidies will assist local Committees of Management to maintain a high standard at the various kindergartens, and will facilitate the extension of kindergarten work throughout the Metropolitan area.

Reference is made in the reports of the Medical Officer of Health and Dr. Kincaid to the problem of emergency "home-help" for mothers, towards the provision of which Municipal Councils were authorised under the Local Government Act 1944 to make contribution. From the survey made by Dr. Kincaid, it would appear that probably the best way in which mothers in the City could be helped would be by the provision of suitable residential creches in which young children could be cared for during the mothers' period of incapacitation or necessary rest. Dr.

Kincaid also suggests that a holiday home for mothers with children would be a valuable asset

and the Medical Officer of Health endorses this suggestion.

Owing to doubt as to the Council's power to make contributions towards the maintenance of kindergartens, creches and certain other social welfare activities, representations were made to the State Government for the introduction of legislation to clarify the position. It is satisfactory to report that in the Local Government Act 1944, power was given to municipal Councils (including the City of Melbourne) to expend municipal funds on pre-school activities such as kindergartens. On the initiative of Councillor the Hon. W. Barry, M.L.A., further provision was inserted in such Act for the Council of the City of Melbourne to apply any sums of money for or towards the provision of any social services for the benefit of its people.

The maintenance grants made by the Council to kindergartens and creches for the year 1944-1945 were the same as for the previous year, namely £1000 and £500 respectively. In addition, grants totalling approximately £3000 were made by the Council, on the Committee's recommendation, to religious and other bodies conducting kindergartens and creches in the City of Melbourne for the purpose of assisting them to make the necessary alterations and extensions which were

urgently required and to provide suitable equipment in keeping with desired standards.

The Committee continued its assistance to parents in indigent circumstances by the supply of milk and an iron and vitamin mixture, the total expenditure being £1345/17/6, of which the amount of £529/12/3 was refunded by parents. The number of families needing assistance in the supply of milk and foodstuffs shows a further reduction owing to the improved economic conditions.

The total amount expended by the Council on the maintenance work of the child welfare centres in the City of Melbourne during 1944 was £3978/19/3, of which £984/7/6 was contributed by the State Government. It is satisfactory to record that during the year the State Government further increased its subsidy, as from 1st October 1944, from £787/10/- to £1155 per annum, being at the rate of £165 per nurse in comparison with £112/10/- per nurse for 1943.

Since 1927, the Council has spent £83,078 on the construction, equipment and maintenance

of child welfare centres, kindergartens and creches.

The Committee desires to record its appreciation of the services of all those who have contributed to the carrying out of child welfare work throughout the year, especially by the Committee of Management of the Lady Huntingfield Free Kindergarten, the voluntary workers in all the other Kindergartens and Creches in the City of Melbourne and all those who have been good enough to devote so much of their time to helping the Sisters in the Council's Child Welfare Centres.

INFECTIOUS DISEASES

During the year, the City of Melbourne was free from any notable epidemic or outbreak of infectious disease.

It is satisfactory that cerebro-spinal meningitis, the "war-time fever," showed a further decline, only eight cases being reported, though four of these were fatal.

The total number of patients, 430, suffering from tuberculosis, who were under supervision in 1944 again shows an increase over the figure for 1943 and preceding years. The number

of deaths from tuberculosis was 85, in comparison with 67 for the previous year.

In his report, the Medical Officer of Health refers to the unsatisfactory situation regarding tuberculosis, which was commented upon in his previous annual report, and points out that it is somewhat aggravated according to the statistics for the year. "Owing, however, to movements of population," he continues, "it is very difficult to draw reliable conclusions from figures relating to the City only and the problem of tuberculosis is indeed one of State-wide concern as is amply recognised by the State Authorities. It is gratifying that plans for improvements in the tuberculosis measures of the State seem to be well in hand."

However, the success of a large-scale assault on tuberculosis depends not only on medical treatment but also on economic factors. Patients will not happily face the necessarily lengthy sanatorium treatment if they are worried about the livelihood and welfare of themselves, or, more particularly, of dependants. The Committee urges the Government to give earnest consideration to include in its comprehensive plans some adequate provision to relieve this source of worry, which undoubtedly reflects itself in the figures as to the incidence of the disease.

INFECTIOUS DISEASES HOSPITAL—FAIRFIELD

The Council's contribution towards the Queen's Memorial Infectious Diseases Hospital amounted to £12,414/11/4.

The contributions for the past five years were:—			
1940	11,588	14	6
1941	11,105	7	4
1942	11,501	7	0
1 943	12,001	4	0
1 944	12,414	11	4

HEATHERTON SANATORIUM

The Council's contribution towards the Heatherton Sanatorium was £1498/7/6. The contributions for the past five years were:—

1940	1,266	9 8
1941	1,260	1 6
1942	1,362	1 10
1943	1,446	4 8
1944	1,498	7 6

During the year, the State Government allocated £50,000 to the Infectious Diseases Hospital for the erection of an isolation wards block and other necessary buildings, and relieved the Metropolitan Municipalities of the liability of contributing one-half of this amount as provided by the Health Act 1928. The Committee desires to express its appreciation of the action of the Government in providing the full cost of these additions.

The Heatherton Sanatorium Act 1944 provides for the abolition of the Heatherton Sanatorium Board as from the 1st February, 1945, and the full financial responsibility of the Institution has now been transferred to the State Government, whereas, up to date, half the cost has been contributed by certain Metropolitan Municipalities, including the City of Melbourne. The Council will, therefore, be relieved of any further financial responsibility after the 31st January, 1945. Since the foundation of this institution in 1914, the Council has contributed the sum of £38,704/12/1 towards its maintenance.

FOOD SUPPLIES

Reports upon the examination of milk indicate that the chemical quality of milk samples was again satisfactory and was, on the whole, very creditable to the trade and re-assuring to the public, but the results of the examinations of samples of milk for cleanliness and presence of bacteria were, unfortunately, not so satisfactory, the tables showing that the average germ counts were higher than they were during the previous year. This deterioration is probably due to manpower and other difficulties caused by the war-time conditions, but the Committee again stresses the need for unremitting care and high standards in this regard.

Under the Milk Pasteurization Act, which was passed last year, Municipalities are required to establish milk pasteurization depots or to delegate some person or company to establish such depots with the approval of the Governor-in-Council. It is expected that the City of Melbourne, in conjunction with five other Municipalities, will be required to establish a Municipal milk depot for an area covered by these six Municipalities.

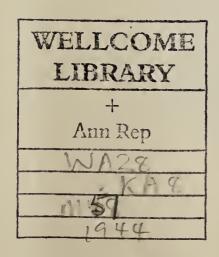
HOUSING

The general housing shortage, due to lack of manpower and materials owing to the war, has exercised the minds of the Committee during the year. The situation in the City itself, as pointed out by the Medical Officer of Health in his report, is the same as it was in 1943, and while urgent repairs have been effected at 416 premises under the nuisance section of the Health Act, more of this essential work could have been accomplished if Government planning of wartime economy had provided a pool of the necessary materials in order that urgent works might be carried out as required by a health officer.

Attention is drawn to the remarks on the subject of Housing by the Medical Officer of Health in his report for the year 1944.

W. C. L. TOWNSEND, Chairman, H. S. WOOTTON, Town Clerk.

3rd July, 1945.



REPORT OF THE MEDICAL OFFICER OF HEALTH

Health Department.

Town Hall Chambers, MELBOURNE.

29th May, 1945.

The Chairman and Members, Health Committee: Gentlemen,

I beg to present my report for the year 1944.

The relatively good health of the community recorded in recent years, has been continued during 1944 and there has been no prevalence of serious epidemic or other disease. It seems from reports that similar satisfactory conditions have been maintained in North America, and even in Great Britain. Whilst it is difficult to be sure of the reasons for this satisfactory state of affairs, it seems probable, as suggested in previous reports, that the more even distribution of the necessities of life, especially of food, throughout the population, has been, to a considerable extent, responsible. In pre-war years there was, unquestionably, even in the most "prosperous" countries, a larger proportion of the population who were unable to obtain the essentials of health and suffered in consequence. There was probably also a proportion of the more prosperous sections who damaged themselves by over-indulgence. It is clear that the rationing of foodstuffs and the reduction of luxury consumption would tend to reduce both these causes of ill-health, though there is little doubt that the improvement of the nurture of the relatively poor would be a more important influence. Other factors, however, may well have played a considerable part in the continuance of good health, such as the improved methods of control of infectious and infectious diseases by the discovery and use of such valuable and effective drugs as the sulpha compounds, penicillin, and D.D.T., whilst it may well be the case that "pure chance," or in other words, unknown factors, have played a major part in the absence of severe epidemic disease.

VITAL STATISTICS

The figures for the last ten years and of the averages for the five year period 1930-1934, as supplied by the Government Statist, are shown in Table 1:—

TABLE 1

Year	Estimated Mean Population	No. of Births	Birth Rate	No. of Deaths	Death Rate	Infantile Mortality Rate por 100 live births
1930-34 (5 year average)	94,180	1202	12.8	1079	11.5	
1935		1119	12.4	1111	12.3	56.7 49.2
1936	92,850	1:31	12.5	1147	12.7	53.9
1937	92,850	1176	13.0	1104	12.2	41.7
1938	92 900	1156	12.8	1135	12.6	39.8
1939	93,200	1105	12.2	1208	13.4	36.2
1940	93,650	1257	13.7	1210	13.3	54 1
1941	95,400	1303	14.2	1186	12.9	36.8
1942	95,500	499	16.1	1283	13.0	44.0
1943		1894	18.1	1226	12.3	43.8
1944	190,485	1655	16.5	1227	12.2	32.0

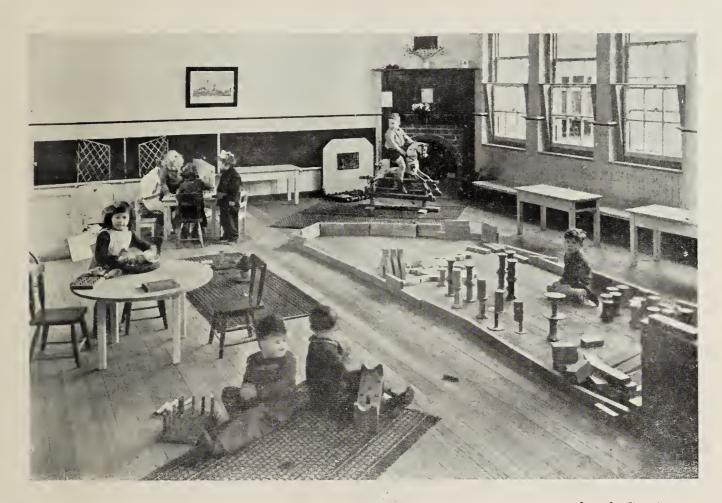
It will be observed that the number of births recorded for the City was fewer than in 1943 by 149 and that the birth-rate was correspondingly reduced to 16.5 from 18.1. Whilst a fall in the birth-rate is to be expected it is to be noted that the total number of births in Victoria was slightly greater in 1944 than in 1943 and that the birth-rate for Greater Melbourne was only slightly less than last year, namely, 19.3 as compared with 1989. It is probably that young parents with increasing families tend to leave the City and go to the outer suburbs.

The most striking feature of the year has been, however, the reduction in the death-rate of infants. The figure for the State as a whole was 31.98, for the Metropolitan area 31.05, and for the City 32.02. Whilst this is a matter for satisfaction and congratulation to the infant welfare services and the mothers of the State generally, it is to be noted again that this is part of a world-wide trend, or at least one which embraces the major civilised countries whose lands are not actually involved in the war.

The figures for New York City, for example, are very remarkable. With a population of over seven million, the infantile mortality rates for 1942 to 1944 were 28.8, 30.2 and 31.2. It is to be hoped that the New York health authorities will indicate what factors have, in their opinion, been mainly responsible for this truly remarkable achievement. Infantile mortality figures are usually regarded as a sensitive index of the prosperity or standard of living of a population, and, in the n eantime, it seems reasonable to suppose that a large part of the explanation is that the war has brought prosperity to the people of New York: though it is well recognised that the health services of New York are conducted with outstanding efficiency and enterprise. Whatever may be the factors involved, however, thelow figures throughout Australia are very satisfactory, and there is good reason to hope that the nation will succeed in maintaining this new and satisfactory advancement in health and even in improving upon it.

A SUCCESSFUL EXPERIMENT IN CO-OPERATION

City Council Infant Welfare and Pre-school Centre at Pigdon Street, North Carlton, Infants' School. The Victorian Department of Education provides the staff for the pre-school centre. Opened in 1929, this combined unit was remodelled and enlarged in 1944.



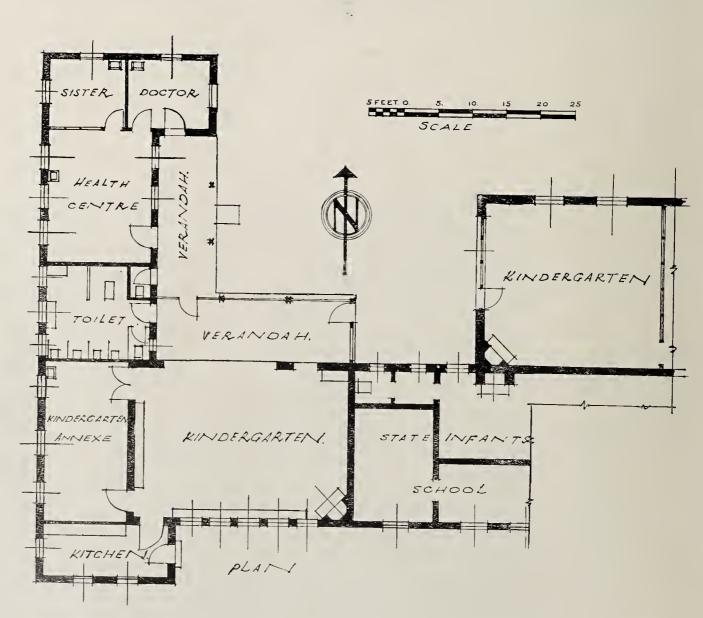
Pigdon Street Infants' School. One of the rooms of the Pre-school Centre.



Pigdon Street Infants' School. Play ground of the Pre-school Centre.



Pigdon Street Infants' School. A view in the Infant Welfare Centre



Pigdon Street Infants' School. Plan of the Infant Welfare and Pre-school Centre — by E. N. BEILBY, City Architect.

The general death rate in Melbourne, 12.2 per 1000, is almost identical with that of last year, 12.3.

Jii 1/1

CHILD WELFARE

The report of Dr. Kincaid upon the child welfare work gives details of valuable activities which are gradually coming to cover more completely not only the first year or two of life, but the remainder of the pre-school period also.

The year was notable in that the State Government extended its recognition of the value of the work by amending the Local Government Act to authorise local authorities to expend funds on pre-school activities. The Government also created a Ministry of Health under which almost all the public health activities of the Government are now controlled. This re-organisation has included the establishment, under the Chief Health Officer, of a Branch of Maternal and Child Hygiene, within which the following activities are to be co-ordinated—pre-natal hygiene, infant health, pre-school child activities, school medical and dental services, and psychiatric clinics. This is a very noteworthy step which is welcomed by the executive officers engaged in the various activities, and it is particularly encouraging that the Department of Health has appointed a number of highly-trained officers from the Kindergarten Union to serve in the division of pre-school activities. We are very happy to avail ourselves of their help as we have in the past of the help of the officers of the Infant Welfare Branch of the State Health Department. The State Government has also given further encouragement to the development of child welfare work by increasing the amount of its subsidies for infant welfare activities and by offering subsidies to bodies conducting approved kindergartens.

In the City advances include the opening of the new health centre at the Pigdon Street State School in North Carlton, and the enlargement of the Nursery School which is conducted there by the Education Department in collaboration with the Council. Illustrations of these improvements accompany this report. The new Hopetoun Kindergarten in Kensington has been completed and was ready to open early in the New Year under the control of a committee of local residents.

Whilst these additions to the pre-school facilities in the City and the increasing public interest in the work are gratifying, it must be realised that, even so, only a small part of this great field has, as yet, been covered. The majority of pre-school children in the City who could benefit so much by kindergarten supervision cannot yet be accommodated and this is due, not only to lack of buildings, but also to lack of staff. Demands for trained staff are increasing by leaps and bounds throughout the State and it is urgent that the Training College of the Free Kindergarten Union should be extended so that larger numbers of its admirably trained graduates will be available.

Dr. Kincaid comments in her report upon the problem of "home-helps," towards the provision of which local authorities are now authorised to make contribution. It appears from the survey which she has made that probably the best way in which mothers in the City could be helped would be by the provision of suitable residential creches, in which young children could be cared for during the mother's period of incapacitation or necessary rest. Dr. Kincaid also suggests that a holiday home for mothers, and mothers with children, would be a valuable asset, and I heartily endorse the suggestion.

Surveys have been made recently of the four creches operating within the City boundaries, and it is hoped that it will be possible in the near future to improve conditions in these institutions by structural alterations and by modifications of the programme. It is very encouraging that a supervisory officer for this work has been appointed by the Victorian Association of Creches.

Interesting evidence of the relative prosperity of the people is that the amount of dried milk supplied through the Centres was still further reduced during the year, the daily number of beneficiaries, which in 1940 was 850, having fallen from 298 in 1943 to 289. The amount of vitamin concentrates issued through the centres, shows a decrease from 89 gallons to 60 gallons.

It is regretted that owing to the impossibility of obtaining dental officers, the Council's own dental clinics at Kensington and Carlton were closed throughout the year. Urgent cases were, however, as heretofore, referred to the children's clinic at the Dental Hospital, for which services we are greatly indebted to that institution

INFECTIOUS DISEASES

The report by Dr. Hilda Bull upon the incidence and control of infectious diseases during 1944 shows that the experience of the year was again fortunate.

Apart from a localised outbreak of diphtheria in North Melbourne, there were no outstanding events. Immunization against diphtheria was accepted as before, but still to an extent which can be regarded only as moderately satisfactory, and the procedure is not, in my opinion, adopted sufficiently widely throughout the community generally to insure against serious prevalence of the disease. This insurance has been successfully carried out in large areas of the United States of America and in Canada, and great progress is now being made in Great Britain and in New South Wales. Among the seven million inhabitants of New York there were in 1944, only 240 cases and 7 deaths. I consider that approach should be made to the new Ministry of Health with a view to the organisation of a widespread campaign of publicity and advertising in order to remedy the present unsatisfactory position.

It is satisfactory that cerebro-spinal meningitis, the "war-time fever" showed a further decline, only eight cases being reported, though four of these were fatal.

The unsatisfactory situation regarding tuberculosis which was commented upon in my last annual report, is somewhat aggravated according to the statistics of the year. Owing, however, to movements of population, it is very difficult to draw reliable conclusions from figures relating to the City only, and the problem of tuberculosis is indeed one of State-wide concern as is amply recognised by the State authorities. It is gratifying that plans for improvements in the tuberculosis measures of the State seem to be well in hand.

FOOD SUPPLIES

The attached report by the Chief Health Inspector, Mr. T. G. O. Jordan, gives details regarding the activities of his branch during the year, including those of the inspection of food premises and the examination of foods.

From the point of view of food value as disclosed by chemical analysis, the results of the examination of milk samples were again very satisfactory, and on the whole, very creditable to the trade. Although a number of samples were found to be below standard, it is noteworthy that four such samples were discovered among a total of 53 samples taken from two firms who actually head the list in respect of the richness of their milk in the group of large suppliers in which they are included. Since the average quality of the milk is so high, it is not unreasonable to assume that the occasional failure to comply with the standard was truly accidental or at least very difficult of avoidance on the part of the firms concerned.

The results of the examinations of samples for cleanliness and presence of bacteria are, unfortunately, not so satisfactory, and the tables show that the average germ counts were higher during last year than in 1943, and that there is no sign of the resumption of the gradual improvement which was recorded up to the early years of the war. It is probable, as has been suggested in recent reports, that this deterioration is to be explained by the man-power and other difficulties due to the war. A considerable confirmation of this view is afforded by the results of the phosphatase test, which indicate that in the actual use of the pasteurising plant a greater degree of success has been obtained than before. This apparent paradox may be explained by the fact that it is easier for a responsible man to ensure the proper operation and timing of this process than it is to ensure the effective carrying out of the laborious and extensive operations of washing, scrubbing and sterilising the very numerous utensils and parts of the plant. Added to this, is the fact that there has been no evidence of improvement in the cleanliness of the raw milk as it arrives at the pasteurization plants.

During the year, the Committee appointed under the Milk Pasteurisation Act presented a scheme for the pasteurisation of the milk supply for the whole of the Metropolitan area. This scheme proposed the establishment of two large depots to supply the northern and southern parts of the metropolian area respectively, to be controlled by the municipalities in the areas delineated. It is understood that this report was referred back for further consideration and that subsequently the Committee have advised the erection of six depots, each of which will supply a group of municipalities and be controlled by that group.

The proposal for communal control of the important business of securing bulk supplies of milk and of ensuring their high quality and correct pasteurisation is to be welcomed. It is not easy, however, to see how the vast undertaking of securing regular supplies for these depots and ensuring their just allocation can be satisfactorily managed unless there is established some coordinating authority to manage the procurement of supplies and to ensure some degress of cooperation between the depots. The future of the milk supply for the metropolitan area seems still to rest "on the knees of the Gods."

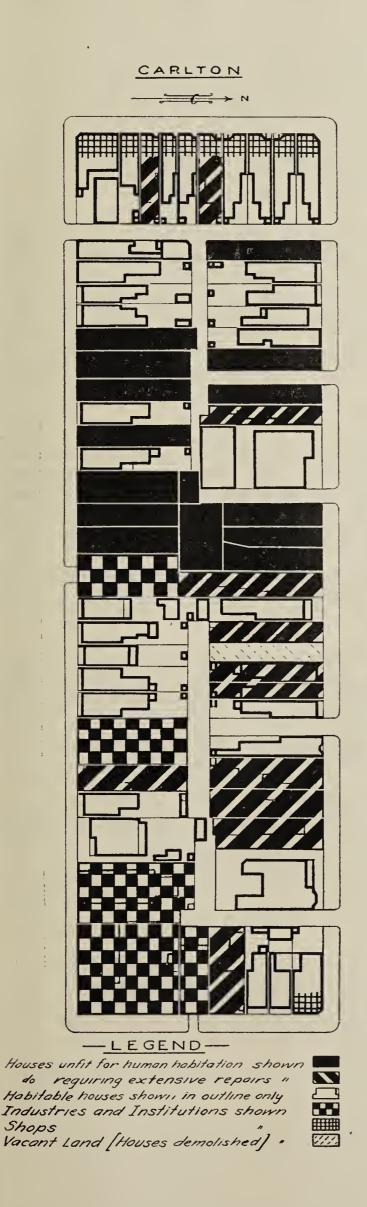
HOUSING

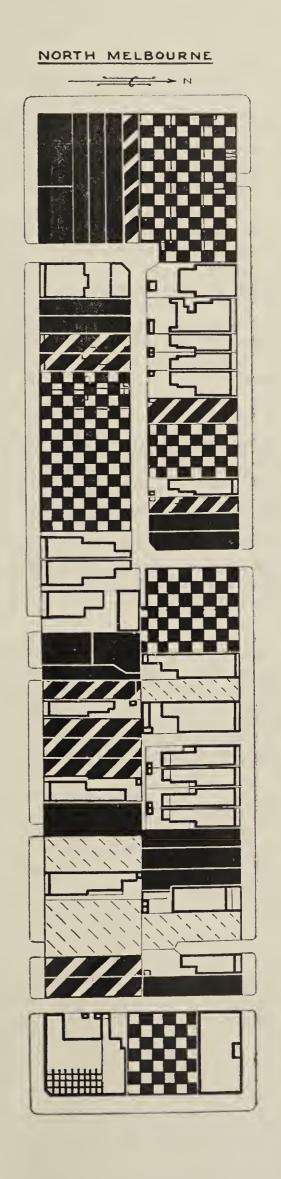
The ominous situation which prevails in respect of housing generally has become even more disturbing, and growing public concern has been expressed in various ways throughout the year. It is probable that the general condition of the existing housing has, on the whole, deteriorated, during the year. The officers of the department have not been inactive. Urgent repairs to 416 premises have been carried out under the Nuisance section of the Health Act and more of this essential work could have been accomplished if there had been established, as has been several times requested, a pool of the necessary materials from which supplies could have been drawn upon requisition, countersigned, if necessary, by a health officer in order to carry out urgent works. The situation in the City itself is, therefore, the same as that which was discussed at some length in my report for 1943. In my concluding remarks I said "that the question of policy had to be decided and thereafter an immense amount of detailed planning would be required in order that the major portions of the residential areas of the City could be put to proper use."

As stated in previous reports, it is particularly in respect of sections of Carlton and North Melbourne that action is required.

The accompanying illustrations show a typical block in each of these residential areas and demonstrate how few of the existing houses are, or could be made fit for habitation according to the "standard of habitability" set out in the regulations made under the Housing Act 1939, and how utterly unsatisfactory is their layout and orientation in the light of modern requirements.

There are one hundred and five (105) dwellings in the two areas, occupied at present by two hundred and sixty (260) adults and sixty-three (63) children. As an overall indication of the quality of the dwellings, it is very significant that of the one hundred and five (105), only twenty-two (22) are provided with a sink. Seventy-seven (77) of the houses are single-fronted with a frontage of less than 20 feet, and of these, fifty (50) are single-storied and of the "tunnel" type of a width of 16 feet or less.





The hundred and seventeen (117) allotments in the two areas belong to eighty-one (81) owners of whom twelve (12) live in the houses they own.

In the part of Carlton, located between Fenwick Street in the north and Grattan Street in the south, it is estimated that there are 3200 dwellings, and in the area of North Melbourne, which is zoned as residential north of Victoria Street, there are approximately 2,800 dwellings.

As a result of surveys such as those detailed in last year's report, it is estimated that a large proportion of these, probably not less than 30 per cent. of the whole, are unfit for habitation and cannot reasonably be made fit, whilst in respect of a further large proportion, it is very doubtful if reconditioning and equipment with modern facilities would be worth while. In face of the situation created by the war, it is indeed difficult to decide what course to pursue, even in respect of the nature of the planning to be undertaken. Had the areas been devastated by bombing one would have no doubt that plans for complete reclamation, re-allotment of areas, and provision of modern, properly orientated dwellings with adequate and properly-spaced playing areas and community facilities would be undertaken. Since, however, the existing dwellings have, almost unfortunately, not been destroyed by enemy or other agencies, it may prove impracticable, at any rate in the near future, owing to the desperate shortage of houses, to replan the areas in conformity with the heart's desire of the modern architect and town planner.

At the very least, however, considerable reclamation, perhaps on a patchwork scale will have to be carried out. This must include the large pockets of vacant allotments and houses fit only for demolition and must also include the provision of properly spaced communal facilities and playing spaces in the two major areas delineated above. It would indeed seem that this degree of planning at least is work with which the Council itself should be empowered and encouraged to undertake without delay. It is, however, difficult to see how even a partial scheme of reclamation and replanning can be undertaken with confidence and equanimity, unless it is preceded by the adoption of the principle of rating upon unimproved values or of some other equally effective means, if such exist, of ensuring that the costs of improvements are justly shared amongst the ratepayers.

RATS

In his report, Mr. Jordan deals at some length with the work of rat destruction, and there may be some evidence that they have increased in numbers throughout the metropolitan area, though the numbers destroyed are no greater than they were just prior to the war. Probably the increasing proportion of the brown or Norwegian rat in the total killed is indicative of an upsurge of that species which tends when numerous to drive away the black rats from what are, from the rat point of view, the more desirable areas—the Tooraks of rodent society.

In view of the manpower difficulties and the depletion of the rat gang owing to the war, I consider that the personnel have done and are doing a very good job.

GENERAL

It is greatly to be regretted that there has been no improvement in the situation regarding the disposal of offal and animal refuse, a proportion of which has again had to be disposed of by burial. Apart from that, however, the offensive trades and other sources of possible nuisance and danger to the public health have been carefully supervised.

I once again wish to express my very high appreciation of the work of the whole of the officers and staff of the Department.

Yours faithfully,

JOHN DALE, O.B.E., M.D., B.Sc. (Public Health)

Medical Officer of Health.

CHILD WELFARE

Health Department,

Town Hall Chambers, MELBOURNE.

27th March, 1945.

The Medical Officer of Health;

Sir,

I have the honour to report on the child welfare activities for the year 1944.

On the whole, the health of the children has been good. There were epidemics at various times during the year of mumps, whooping cough and the so-called "gastric influenza." Though fairly widespread, none of them, fortunately, was very severe in nature.

The infantile death rate, 32.02 was a record low one and was very little above the rate for the whole metropolitan area, 31.05. The lowering of the rate was most marked in babies under one month of age, being 19.9 as against the average for the last ten years of 28.2, whilst the rate for those between one month and one year was 12.08 as against the average for the last ten years of 16.7.

The number of births in the City area, viz., 1655, though less than in the previous year, was still well above the average for the last 10 years, viz., 1267. There were 22 sets of twins.

Of the (approximately) 1700 living children aged between one and two years, there was only one death, and of the (approximately) 5000 living children between two and six years there were eight deaths, four of which were accidental.

It is impossible to say why the infantile death rate has fallen so markedly. Several factors may have contributed to it, such as (1), the influx into good residential flats in certain parts of the City of a large number of young married people of excellent physical, mental and social standards; (2) the raising of the average income throughout the community; (3) the rationing of essential foodstuffs such as meat and butter, which not only ensures that each one may have an adequate share, but draws attention to the amounts which should be consumed of such essentials: (4) the less liberal supply of the unnatural foodstuffs, such as biscuits, sweets and cakes; (5) the increase in the natural desire of young parents to have children when the father's life tenure is so uncertain; (6) the possible diminution of physical strain to young mothers, who, because of their husbands' absence and because of the housing shortage often live with their own parents. who, doing most of the houskeeping, leave the mother free to devote more care to herself and her baby. Many grandmothers of to-day are still comparatively young women who have sought health centre advice and are keen for their daughters to do the same. The possible advantages that mothers may get from living with their parents is, however, sadly offset by the overcrowding of already inadequate and extremely ill-equipped houses. Better housing is indeed an urgent requirement.

Home-helps.

In an enquiry from 100 mothers as to the need of Council-provided home-helps at the time of child-birth, 57 stated that they had been able to make satisfactory arrangements with relatives and had not needed any other help, nine would have liked to have resident help for which payment could have been made, whilst 34 said they would have liked to have help daily or by the hour. Some of these lastmentioned could have made some contribution towards payment, whilst others could have paid nothing. None of the 34 had any accommodation at all for a resident help, and, in many cases, conveniences were so poor that it is doubtful whether any casual helper would have been willing to give her services. A helper to be a true help in the mother's absence needs to be "on the job" most of the time, and I am inclined to think that assistance "by the day" or "by the hour" would not be very satisfactory. A reliable holiday home, similar to the homes run by the Kindergarten Union, where children could be cared for while mothers are sick or in hospital, might solve the problem better than home-helps in such circumstances. A similar holiday home is needed also for tired mothers, who, themselves, have no means of escape from their homes excepts for a confinement in hospital.

Centre Attendances.

The attendance at the Health Centres has been well-maintained, all the figures being somewhat higher than last year. Attendances at the session conducted once a week in the South Yarra district increased rapidly soon after the Centre was opened last year, and it is now felt that two sessions a week are necessary to meet the demand for service there.

Photographs illustrating Centre work follow page 28.

Kindergartens.

There are 19 kindergartens in the City area, a new one, built in Kensington by the City Council, being just completed. This new kindergarten is similar in size and type to the first one built by the Council in North Melbourne several years ago. Both are two-unit kindergartens which cater for 65 children, and are of a high standard in regard to building, equipment and staff. The one just completed will be used as a training place for kindergarten students. Both have had many interested visitors from this and other States. Unfortunately, not all the 19 kindergartens in the City are of as high a standard, but with the increasing realization of the needs of children

and of the importance of parent education, all bodies governing kindergartens are now endeavouring to arrive at good standards as rapidly as possible. All the governing bodies have recently appointed trained supervisors to visit the kindergartens so that they may advise and help in the quick attainment of standards which are generally accepted as desirable. Children from all the kindergartens were medically examined by the Council's medical officer for child welfare.

The Lady Gowrie Centre has continued to serve as a very valuable demonstration to the many and varied groups who have come there to observe. University lecturers, teachers and student teachers, doctors and medical students, matrons and hospital trainees, kindergarten directors and committees, social workers, architects, clergy and missionaries, politicians and councillors, broadcasters, officers of various Government departments, members of women's organisations, officers of the military services, and members of various organisations for the care of children, have been amongst the many visiting groups, and all have stated that they have obtained a wider vision of what constitutes full development by a detailed observation of the working of the Centre.

Practically all visiting groups, after watching the developmental work outside and inside the playgrounds visit the medical section, where the inter-relation of physical, mental and social development is discussed. The majority of the visitors also see the health centre, with its dental block, next door, and realize the value of co-operation between the two places, and are also told of the link which exists between the Lady Gowrie Child Centre and the schools to which the children progress.

So far, most of the visitors have come because they were sufficiently interested to do so. The uninterested are those we specially want to come, but it is a good sign of the times that increasing numbers of people are becoming interested.

Some of the visiting groups have thought it imperative for full physical development that a Child Centre should have all the outdoor equipment that The Lady Gowrie Centre possesses, and would have gone away sorrowful because their children did not have all this rather expensive equipment, had it not been pointed out that, although such equipment is very valuable, it is not essential where a good variety of natural inducements to play and activity are present. Such things as trees to climb, streams to bridge, rocks to balance on, beach sand to play in, sea to swim or paddle in, birds to watch, animals to frolic with and plants to tend, cannot be quite matched artificially.

The last war revealed an astonishing amount of physical defect when recruits came to be examined. We did not need a war this time to emphasise the amount of physical imperfection. We were fully conscious of it, and were striving to prevent it by attention to young children in their growth period. But we are still far from perfection. Carious teeth, for instance, are still numerous, though fortunately not so numerous as even a decade ago.

Defects of posture, also, both of trunk and limbs, are relatively frequent. Some degree of eversion of the feet is extremely common. We feel if children could be more without shoes and socks, the natural muscular activities of the feet would counteract this. Failing this, we should see that good footwear is worn. More and more mothers are becoming conscious of the harm done by shoes of poor shape and construction, and ask for authoritative help in the type of shoe they should buy. The shape and size of socks is as important as that of shoes.

A good approach was made to the foot problem in New Zealand, where representatives of manufacturing associations, Health Departments. infant welfare specialists and orthopaedic specialists met in conference, to advocate production of shoes of good standard shape and quality.

Poor trunk posture is so largely a matter of general muscle tone and nutrition that all living conditions deleterious to full development affect it. Cramped, poorly lighted, poorly ventilated and poorly equipped houses detract from good posture during sleep and indoor activities, whilst lack of space and lack of inducements for play and activity similarly detract from good posture out of doors.

Well-run kindergartens can and do provide good conditions for about a quarter to a third of the child's day, but they do not supply requirements for 24 hours.

Wars, with all their insanity, generally seem to illuminate some social ill. This one has made more obvious than before in what a poor psychological and physical environment some of our children are expected to develop. Better housing, better play and social possibilities and better education of parents are goals to work for.

Education Week.

In October, an "Education Week" was held in order to stimulate public interest in educational matters. Lectures, broadcasts, demonstrations and displays were arranged and the public was invited to visit the Health Centres and kindergartens with a view to seeing how closely related health is to parent education and to full child development. A number of visitors stated that they had been quite unaware of the extent and significance of the work being done.

Training Courses.

Sisters doing their Infant Welfare Course at the Presbyterian Babies' Home attended our Centres for instruction and practice in the Centre work required for their course. Fourteen Sisters attended during the year.

Lectures in Mothercraft.

At the beginning of 1944, the Catholic Schools in the City requested that they should receive the same lectures as the State Schools. This service had been offered some years ago but had not been accepted then. In all, 12 schools received instruction by Sister Shaw. Five hundred children attended the lectures, 400 of whom sat for the examinations. Of these, 273 gained certificates, 121 passed the examination and six failed.

Milk and Accessory Foods.

The amount of wet milk supplied through the Centres was 1,036 pints (all of which went to three tuberculous patients).

The amount of dried milk supplied through the Centres was 19,874 lbs. This was 187 pints less wet milk and 4582 lbs. less dried milk than was supplied in 1943. Seventy-four gallons of an iron and vitamin mixture were distributed.

The total number of recipients during 1944 was 551 (belonging to 415 families). One hundred and seven individuals (belonging to 86 families) received help continuously throughout the whole year.

Breast Feeding Records.

Records of 1041 children at six months of age showed 39.4 per cent, to be breast fed with only the addition of an educational diet, 8.6 per cent, to be partially breast fed with a complement of milk mixture and educational diet, and 52 per cent, to be artificially fed entirely.

TABLE SHOWING VOLUME OF HEALTH CENTRE WORK.

		uncil	Training			
	Ce	ntres	(V.B.H	ł.C.)	Tot	al
	1943	1944	1943	1944	1943	1944
No. of new babies	1172	1287	277	331	1449	1618
No. of individual babies under 1 year	1202	1223	133	180	1335	1403
No. of individual babies between 1 and 2 years —	1046	1114	47	67	1093	1181
Total number of individual babies under 2 years	2248	2337	180	247	2428	2584
Total attendances of babies under 2 years	25,368	28,456	3031	3793	28,399	32,249
Total number of new expectant mothers	136	139	14	9	150	148
Total number of individual expectant mothers	174	177	7	5	181	182
Total consultations with expectant mothers	407	505	24	17	431	522
Visits by nurses to mothers and babies	4987	4973	697	653	5684	5626.
No. of times babies referred to doctor or hospital	501	499	87	119	588	618
No. of children new to pre-school sessions	582	597	10	8	592	605
No. of individual pre-school children	1334	1581	16	13	1350	1594
Total attendances of pre-school children	4605	4830	106	137	4711	4967
Visits or consultations re pre-school children						
(apart from sessions)	2796	2374			2796	2374
No. referred to Dental Hospital	263	211		1	263	212.
No. of pre-school children examined at their own						
Kindergartens			_	_	424	440

MATERNAL MORTALITY

We received notifications of seven deaths, connected with pregnancy or labour, viz.—

Septicaemia, associated with abortion	. 1
(Age 33, married, home duties)	Died at the Women's Hospital.
Pulmonary embolus	One died at the Women's Hospital.
(Ages 23 and 25, both married, home duties)	One died at a private hospital,
Ruptured ectopic pregnancy	1
(Age 37, married, home duties)	Died at a private hospital.
Toxaemia and hyperpiesis	. 1
(Age 40, married, home duties)	Died at a private hospital.
Preeclampsia and acute duodenal ulcer	
(Age 33, married, home duties)	Died at the Women's Hospital
Heart failure and collapse	
(Age 31, married, home duties)	Died at a private hospital.

INFANT MORTALITY

The number of births notified during the year was 1,519, and the number of infant deaths 52 (34 of them being neonatal). After allocation to the City, by the Government Statist, of 136 births and one death, the infantile death rate as computed by him was 32.02—the neonatal death rate as 19.94 and the death rate of those between one month and one year as 12.08.

Deaths under one year per 1,000 births.

	Approximate average for the 10 years 1934-43		For	the year 1944		
	Under one month	Bet. 1 month and 1 year	Total	Under one month	Between 1 mont and 1 year	h Total
City of Melbourne	28.2	16.7	44.9	19.94	12.08	32.02
Greater Melbourne	23.4	15.5	38.9	22.28	8.67	31.05

Neonatal Deaths

The causes of the 34 neonatal deaths were.—

Prematurity (with or without complications)	21	Bronchopneumonia 3 Cerebral haemorrhage 2
Inanition	1	Scleerema neonatorum 1
Atelectasis	2	Erythroblastosis foetalis 3
Respiratory failure	1	

Of the 34 babies who died in the neonatal period, six were twin births; 30 had had regular antenatal attention; 18 were born in private hospitals; 15 in Public Hospitals and one in its own home. There were three exnuptial births, but in the 31 nuptial cases all the fathers were either working or in the Forces (25 and six respectively). Nineteen were in first children, others were in second, third, fourth, fifth and sixth children.

Deaths between one month and one year of age.

The causes of the 18 deaths notified at this age were as follows.—

Prematurity	1	Bronchopneumonia, inanition and eczema 1
Inanition	1	Congenital heart and bronchopneumonia 1
Congenital syphillis		Ccrebral atrophy and pneumonia 1
Gastroenteritis	2	Miliary tuberculosis 1
Lobar pneumonia	1	Acute otitis media 1
Bronclinopneumonia	2	Toxaemia and pyelonephritis 1
Bronchopneumonia and exposure	1	Hereditary familial muscular atrophy —— 1
Bronchopncumonia, congenital heart and		Asphyxia from inhalation of vomitus 1
mental deficiency	1	

Five of the 18 children were fairly regular Centre attendants. Of these, two were healthy breast-fed babies, one of whom developed pneumonia and the other bronchopneumonia very suddenly, and both died soon after the onset of illness, in spite of early treatment. Another was a breast-fed baby who was very well for two months and then failed to progress normally in spite of adequate breast feeding. It was sent for investigation and eventually died, in the Children's Hospital, of miliary tuberculosis. Subsequent tests did not reveal any infection in the mother, but the father's tests were not conclusive. One child showed cardiac distress from birth due to a congenital heart lesion and was not expected to survive, and one died from accidental inhalation of vomitus.

Eleven of the 18 died from congenital or neonatal causes and two others who died from bronchopneumonia, though visited at home, did not attend the Centre and mothercraft and home conditions were regarded as unsatisfactory.

Deaths in children aged between one and two years.

There was only one death between one and two years, viz.—

Bronchpneumonia — aged 13 months. This baby attended Centre regularly and was a beautiful, well-developed baby with a careful mother. Onset of illness was sudden.

Deaths in children between two and six years of age.

There were eight deaths between two and six years of age, viz.—

Burns from bath of hot water—two years—known to Centre.
Burns from copper of boiling water—two years—known to Centre.
Injuries when knocked down by bus—three years—not known to Centre.
Myocarditis—four years—died after tonsillectomy—known to Centre.
Diphtheria—four years—attended a Creche.
Bronchopneumonia—three years—not known to Centre.
Bronchopneumoia and encephalitis—three years—not known to Centre.
Malignant tumour of the brain—five years—not known to Centre.

ACKNOWLEDGMENTS

I wish to thank Dr. Bull for her continued supervision of the children at Pigdon Street and also record appreciation of the excellent work of all the Sisters and of the assistance given so freely by the voluntary helpers.

HILDA E. KINCAID, D.Sc., M.B., B.S.

INFECTIOUS DISEASES

Iealth Department,

Town Hall Chambers, Melbourne,

1st May, 1945.

'The Medical Officer of Health:

Sir,

I have the honour to submit a report on the incidence and control of infectious diseases in the City of Melbourne for the year 1944.

DIPHTHERIA.

TABLE I.

Year	No. of Cases	Cases per 100,000	Deaths	Case Fatality	Fatality per 100,000
1915-24 (average)	373	355	14	3.7	13
1925-34 (average)	230	239	6	2.9	7
1935	257	266	7	2.7	7
1936	241	259	5	2.0	5
1937	127	137	2	1.5	2
1938	103	111	1	1.0	1
1939	110	118	2	1.8	2
1940	100	106	2	2.0	2
1941	235	246	9	3.8	9
1942	56	59	1	1.8	1
1943	48	48	3	6.2	3
1944	71	71	3	4.2	3

The incidence of diphtheria, although higher than for the last two years, is still low. The most dramatic incident was an outbreak last February in the North Melbourne district, of an unusually severe type of the disease, which seemed to threaten another epidemic. Fortunately, it subsided in a few weeks. It was reported from the Fairfield Hospital that these cases were of a more severe and resistant type than had been seen for some years, and two of the 12 children affected died. The fact that four children who had been immunized contracted the disease, though in a milder form, suggested the presence of an unusual strain of organism, such as reports from abroad suggested some years ago, though bacteriologically the organisms were of the mitis and intermedius types, and no special features were detectable. The circumstances again raise the question of the possible double nature of diphtheria toxin, the suggestion being that the toxin includes two factors, A and B, of which A is usually predominant. As the antitoxin and prophylactic in general use are prepared from a standard toxin in which factor A predominates, it has been suggested that if the B strain predominates, the antibodies in both the curative serum and the prophylactic material are less effective. None of the four immunised children died, but the rarity of the disease in immunized children makes the incident worthy of note. The fact that the explosive outbreak died down so quickly was undoubtedly due to the fact that a large proportion of the children in the area had been immunized. Among a large number of immunized children it is inevitable that there will be a few who are, so to speak, on the borderline of immunity, and these would be likely to contract a mild form of the disease in the face of a heavy infection, but the majority, certainly about 90 per cent., are firmly protected and can withstand even a massive attack.

The percentage of immune children tested in the schools and kindergartens was 68, almost as high as last year, when it was 71. The slight fall was accounted for by the fact that a school, on the boundary of the City area, which had previously been attended by the adjacent municipality and dropped for a year or two was again taken under our wing, and a large proportion of the children was found to be Schick positive, and, therefore, susceptible to diphtheria. The high figure for immunity is undoubtedly reflected in the continued low rate of incidence of diphtheria in the City.

Incidence.

The incidence of diphtheria, as has already been mentioned, was a little higher than in the years 1942 and 1943. There were 71 cases, 39 in males and 32 in females.

Deaths.

There were three deaths, all in females, one aged four years and two aged six years. Two of the deaths were in North Melbourne children, and one died six days, and the other four days, after admission to hospital. As the duration was given as eight days in each case, the delay was not a major feature, though there was one day of indecision in the second case. The third case was even quicker, the child dying of laryngeal diphtheria two days after entering hospital. The duration was given as four days, and it appears that death in all these cases was due to a very malignant form of the germ.

Rates.

The rate per 100,000, 70.6, was higher than for the last two years, when the figures were 56 in 1942 and 48 in 1943, the record low rate for the City. The figures of Melbourne City were slightly higher than those for the nine adjacent municipalities, and this year higher than those for the metropolitan area, and the state as a whole, due to the small localised outbreaks in North Melbourne and Kensington. Three of the surrounding municipalities evidently had a similar experience, and showed rates of 210, 161 and 108 respectively, considerably higher figures than those for the City. As the Public Health Department has been increasingly successful in inducing and aiding municipal bodies to undertake immunization, the effect of this should be shown, and actually may be reflected, in the lower general figures. The comparative rates were.—

Melbourne City	70.6
Nine adjacent municipalities	
Metropolitan area	
Whole State	

TABLE II.

AGE INCIDENCE

AGE	MALES	FEMALES			Percentages
0-1 year 2 years	2 4 3	$\left.\begin{array}{c} -\\ 2\\ 3\\ 5 \end{array}\right\}$	18 males 10 females	} 28	40%
5 vears	2 7 2 3	2 7 2 2 1	14 males 14 females	28	40%
10 years	$\frac{2}{-}$	$\begin{bmatrix} -\frac{2}{1} \\ 1 \end{bmatrix}$	3 males 4 females	7	10%
14 years 15 vears and over	_	4	4 males, 4 females	8	10%
Totals	39	32 — 71	cases		

Institutional Cases.

Eleven cases occurred in institutions, compared with 21 in 1943. Four were in institutions for the care of children and seven in public hospitals. Two cases were in adults and nine in children.

NUMBER OF INSTITUTIONAL AND GENERAL CASES

TABLE III.

Vone	Total	Institutional	General
Year	200	27	281
1931	308	40	270
1932	310	96	221
1933	307	30	185
1934	215	30	219
1935	257	38	220
1936	241	21 a	118
1937	127	20	81
1938	103	44 52	57
1939	110	53	63
1940	100	3/	220
1941	235	15	44
1942	- 56	12	27
1943	48	21	60
1944	71		00

Diphtheria in Families.

There were five instances of multiple cases, all in families which had not been immunized. In three families there were two cases and in two families three cases. In three families the infections were simultaneous. In one family where three cases occurred two were simultaneous, and one later; and in one family, the second child was apparently infected by the first. Thus 12 cases occurred in these five families.

Diphtheria in individuals previously treated.

As stated previously, four of the children who contracted diphtheria in the North Melbourne outbreak had been immunized and two of these had been re-tested. Of these, one did not report for a reading of the test and the other showed a faint reaction but was not immunized because of illness. The severity of the infection was shown by the fact that two of the eight non-immunized children died, and the others were severely ill, while there were no deaths, and except in the case of one very delicate child, only very mild infections in those who had some protection.

Swabs.

Three hundred and sixteen swabs were taken from contacts of cases of diphtheria, 287 throat swabs, of which six were positive, and 29 nasal swabs, of which three were positive.

Carrier Rate for Diphtheria in a sample of the Metropolitan Population.

Table IV shows the results of swabbing all new entrants at an institution for children, the majority of whom come from the metropolitan area. Although very few positive swabs have been found amongst these children, the decrease in the last two years may reflect the very low incidence of the disease. The only positive swab found showed a negative result with the virulence test.

· TABLE IV.

Year	No. examined	Negative	Positive	Virulent
1940	964	952	12	1
1941	1058	1045	13	4
1942	73 6	731	5	1
1943	600	596	4	
1944	538	537	1	-

Throat Conditions.

One thousand, five hundred and eight-two children presenting for immunization were examined in order to detect and advise on defective conditions of the nose and throat. Of these 958 showed no defect, 201 were notified as needing attention, and 423 showed evidence of previous tonsillectomy. Roughly 60 per cent, were healthy, nearly 27 per cent, had previous tonsillectomy and 13 per cent, needed attention. These figures are practically the same as for last year; the number of previous operations is still high and the number who have either had treatment or require it, comprising 40 per cent, of those examined, is higher than in earlier years, when only about a third of the children examined fell into this category.

Immunization.

Immunization was carried out in health centres, schools and institutions, the number being a little higher than for last year. Alum-precipitated toxoid was given to all children in the schools under eight years of age, as two doses of this material show a higher conversion to a Schick negative reaction than do two doses of anatoxin.

As so large a number of children in the schools show a negative reaction, largely due to previous treatment, it is proposed to drop work in the schools in 1945, and resume next year. All children under six born or living in the City have the opportunity of receiving treatment at the Health Centres where monthly sessions are held. As the work of the Centres increases there are fewer unprotected children entering the schools, and although another dose at school age is advised in order to maintain immunity, the most important part of the work is in pre-school children. They are more vulnerable in these early years, are less likely to have any reactions, and respond well to treatment.

TABLE V.

	Total	Schick	Schick	Not	Not	Imi	munized!
	Presenting	Negative	Positive	immunized	recorded	1	3
HEALTH CENTRES— Swanston Street, Carlton		05 28 82 64 45 35 2 321	2 -7 7 7 4 5 - 25	$ \begin{array}{r} $	8 1 8 11 3 3 — 34	27 5 11 15 10 10 1 79	112 54 156 84 76 155 31 668
Errol Street	124 66 98 555 126 126 126 81 141 236 95 68 120 81 95 70 86 42 42 38 20 21	85 48 63 36 92 103 50 70 162 52 30 54 50 71 48 60 20 21 27 12 12 6	30 14 30 12 27 17 26 68 61 33 25 59 28 17 19 19 19 19	2 4 3 4 3 1 12 4 3 5 1 4 5 2 1 3 1	9 4 5 7 7 6 5 2 13 10 13 5 3 7 3 7 3 1 1	1 1 5 -8 1 3 7 4 3 8 12 4 -1 6 2 4 8 5 2 3	27 13 23 8 16 12 20 61 45 26 14 44 23 13 13 11 16 8
Totals	1851	1165	547	62	128	88	398
INSTITUTIONS & HOSPITALS— Children's Welfare Dept	309 12 40 27 44 7 23 12 141 97 19 77 808	122 26 9 37 16 55 40 6 32 343 1829	64 14 8 — 3 — 86 57 12 43 287 859	8 — 1 — — — 8 8 8 3 2 30 106	42 — 1 2 — 1 46 208		91 12 10 15 6 5 5 12 73 48 9 43 329

SCARLET FEVER.

TABLE 1.

	No. of	Cases per		Case	Deaths per
Year	Cases	100,000	Deaths	Fatality	100,000
1931	246	256	3	1.2	3
1932	209	222	1	0.5	1
1933	131	142	1	0.8	1
1934	100	108	_		_
1935	73	77			_
1836	7 0	75		-	-
1937	50	54			_
1938	202	217	1	0.5	1
1939	325	348	1	0.3	1
1940	244	260	1	0.4	1
1941	240	251	_		-
1942	152	159			
1943	285	287	2	0.7	2
1944	229	228	_		

For the seventh year in succession the incidence of scarlet fever was high, both in the metropolitan area and over the whole State. The number of cases per 100,000 for the nine adjoining municipalities was 431, for Greater Melbourne 443, and for the whole State 341. The figure for Melbourne City was 228.

Incidence.

There were 229 cases of scarlet fever in the City, 86 in males and 143 in females There were no deaths.

AGE INCIDENCE OF SCARLET FEVER.

TABLE 11.

Age	MALES	FEMALES	Percentages
0-1 year	1 8 7 7 7	$ \left.\begin{array}{c} 1\\4\\6\\8\\7 \end{array}\right\} \left.\begin{array}{c} 30 \text{ males}\\26 \text{ females} \end{array}\right) \left.\begin{array}{c} 56\\ \end{array}\right\} $	24%
5 years	11 9 4 1 2	7 7 7 5 5 7 7 7 7 8 9 10 11 12 12 13 14 15 15 15 15 15 16 17 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	25%
10 years 11 years 12 years 13 years	5 5 1 2	10 8 4 2 5 13 males 29 females } 42	19%
15 years and over Totals	16 86 males	57 16 males, 57 females 73 143 females — 229 cases	32%

It will be seen that the usual preponderance of cases in females in the young adult section is again a feature of the incidence. It is only partially accounted for by the institutional cases, and seems to be a feature of the disease.

Scarlet Fever in Institutions.

There were 33 cases in institutions, a considerable drop from the figure of 64 for 1943. Twenty-one of these cases occurred in hospitals, 18 amongst members of the nursing staff, and three in children. Six cases occurred in children in institutions, and six in educational establishments, three in children and three in adults.

Swabs in Scarlet Fever contacts.

One hundred and sixty-one swabs were taken from contacts of cases of scarlet fever; 124 were negative and 37 showed the presence of Group A haemolytic streptococci.

CEREBRO-SPINAL MENINGITIS

The number of cases of cerebro-spinal meningitis was the lowest since 1940. Eight cases were reported, with four deaths, compared with fourteen cases with two deaths in 1941, 46 cases with nine deaths in 1942 and 26 cases with nine deaths in 1943. Three cases were in infants under one year of age, two in males and one in a female infant. There was one case in a child aged one year, one in a male child aged two, one in a female aged seven, two in adult males, one aged 29 and the other 65. Those who died were the female infant aged nine months, a girl aged seven and the two adult males. In the fatal cases the attack was of the fulminating malignant type and the patients were moribund on admission to hospital.

Inquiries into Social Conditions of Families visited on account of Infectious Diseases.

The number of families visited was 238 in 1944, about the same number as in 1943. One hundred and sixty-three were in connection with cases of scarlet fever, 68 with diphtheria and seven with cerebro-spinal meningitis.

Altogether 1304 people, 772 adults and 532 children were living in 1031 rooms, an average of almost 1.3 persons per room, and this average was about the same for each of the three diseases. Last year the average was 1.2 persons per room. The average in previous years has been 1.1 persons per room, so that there is some evidence of increased overcrowding.

The fact that scarlet fever is less socially selective in its incidence than are diphtheria or cerebro-spinal meningitis is again shown by the figures on the state of the housing of the families concerned.

Of the 163 houses where scarlet fever occurred 75, or 44 per cent. were considered satisfactory and 56 per cent. were bad or indifferent. In the 75 houses where diphtheria or cerebrospinal meningitis occurred, 17, or about 21 per cent. were satisfactory and nearly 80 per cent. were bad or indifferent.

In the 238 families there were only six where there was unemployment. During the two previous years there was no unemployment, and it certainly does not appear to be a social problem of any magnitude at the present time.

The number of adults in these families who were working in munitions was remarkably low, being only 12 out of over seven hundred adults.

In 1942, the number of adults in the Services among the families visited was 6 per cent.; in 1943, 20 per cent. and in 1944, 10 per cent.

The number of infections occurring in recent migrants to the City was the same as last year. About 10 per cent. had lived in the City for less than one year, while in 1942 the figure was 20 per cent., in 1941. 28 per cent.

Of the 532 children, just under 50 per cent, had been immunized. This is a lower figure than usual, the average being about 60 per cent.

During the years we have been visiting the families of reported cases of infectious disease we have had the impression that certain families are affected more often than others. This is borne out by the figures. In the 238 families visited this year, there had been 66 previous cases of scarlet fever, and 33 of diphtheria, which is probably above the average for the general population.

TUBERCULOSIS

The total number of patients suffering from tuberculosis under supervision in 1944 was: 430, again a higher figure than for 1943 and preceding years. The figures are as follows.—

TABLE 1.

Year	•						Nι	imber of Cases
1939		 	 	 	 			311
1940								
1941								
1942								
1943								
1944		 	 	 	 	 		430

Of the 430 cases known to the Department, seven were repatriation cases (26 in 1943), five were "wanderers" (19 in 1943), i.e., individuals with no fixed address. This gives an increase among residents of 70 cases, when the figures for these two categories are deducted from the totals for the last two years.

Deaths from Tuberculosis.

The number of deaths, 85, also shows the upward tendency noticed last year. The fact that not only the number of cases under supervision but also the number of deaths is higher, suggests that there is a real increase in cases of tuberculosis, and that the better opportunities for diagnosis do not account entirely for the rise in reported cases.

TABLE II.

DEATHS FROM TUBERCULOSIS

Years	No	0. 01	of deaths
1925-1929	(average annual number)	8 6	86
1930-1934	(average annual number)	66	66
1935-1939	(average annual number)	57	57 .
		88	88
1941		68	
		67	Average for five years $1940-1944 - 76$
1943		/5	/\frac{1}{2}
1944		85	85

The average number for the five years of war, 1940-1944, 76, shows an increase of 19 on the figure for the previous five years, which was 57.

TABLE III.

AGE DISTRIBUTION

Years	Male	Female	Totals.
0-4 years	4	-	4
5-9 years	1	. 1	2
10-14 years	2	3	5
15-19 years	8	10	18
20-24 years	18	26	44
25-34 years	42	66	108
35-44 years	55	39	94
45-54 years	54 36	30	04 40
55-64 years	10	2	21
65 years and over		1	1
Totals	239	191	430

The large number of younger women who were affected is again illustrated by the above figures. The five-yearly figures for the comparison between the number of cases in males and females aged from 15 to 34 years are shown in the following table.—

Year	Males	Females	Totals
1944	67 63 52	102 86 71 70 78	170 153 134 122 148
Totals	320	407	727

New Cases.

There were 149 new cases reported (151 in 1943), 88 male and 61 females. Of these, 44, 32 males and 2 females, died during the year. In 1943, the deaths among the 151 new cases were 40, and in 1942, of 160 new cases only 14 died during the year.

Deaths from Tuberculosis.

There were 85 deaths from tuberculosis. 58 in males and 27 in females, compared with 75 in 1943, 61 in males and 14 in females. Four deaths were due to the non-pulmonary form of the disease, one due to miliary tuberculosis in an infant in contact with an undiagnosed case, and three to tubercular meningitis. All other deaths were from pulmonary tuberculosis, 28 cases died in Sanatoria, 30 in hospitals and 27 in their homes.

Twenty-four had been known to the State Health Department for less than a year, eight between one and five years, 21 between five and ten years and eight up to fifteen years.

As an indication of the rate of progress of fatal cases, 30 had been ill for less than one year, 34 between one and five years, 15 between five and ten years, and 6 over ten years.

TABLE IV AGE DISTRIBUTION OF FATAL CASES

AGE DISTRIBUTION	OF FATAL	CASES	
Age	Male	Female	Totals
·0-4 years	1		1
5-9 years	1		i
10-14 years	D1788	1	ì
15-19 years	1	_	i
20-24 years	1	5	5
25-34 years	5	5	10
35-44 years	10	5	îš
45-54 years	17	5	22
55-64 years	14	4	18
65 years and over	8	1	9
Unknown	_	1	ĺ
TOTALS	58	27	85

Sputum Tests.

Four hundred and thirty sputum tests were made, of which 114 were positive, 70 in males and 44 in females.

Child Contacts.

One hundred and eighty children under 15 years of age were living in contact with cases of tuberculosis. Of the 68 children who were in contact with sputum positive cases, 10 were under five years of age, 28 between five and ten, and 24 between ten and fifteen years of age.

HYDATIDS

There were two deaths from hydatid disease, one in a male who had suffered from a cyst on the liver for nine years, and one in a female of 71 years, where broncho-pneumonia supervened on a suppurating hydatid cyst of many years generation.

ENCEPHALITIS LETHARGICA

A man aged 49 years, who was suffering from the effects of encephalitis lethargica contracted 25 years previously, died of broncho-pneumonia.

MALARIA

Twenty-seven ex-Service men were notified as suffering from malaria, contracted during service in tropical areas.

UNDULANT FEVER

There was one case in a male aged 41, of infection with the bacillus abortus.

OTHER INFECTIOUS DISEASES

Whooping cough and mumps were very prevalent, and during the immunization campaigns in the schools caused many to miss the completion of their course. Measles and chicken pox were also reported, but there were no deaths from these diseases.

ACKNOWLEDGMENTS

I wish to express my appreciation of the work of Sister Dossetor, my assistant in the infectious diseases section, of the nursing and clerical staffs, and also of the Head Teachers and infant mistresses for their sympathetic co-operation in the schools.

HILDA W. BULL, B.Sc., M.B., D.P.H.

REPORT OF CHIEF HEALTH INSPECTOR

Health Department,

Town Hall Chambers, Melbourne.

The Medical Officer of Health,

16th February, 1945

Sir,

I have the honour to submit a report for the year 1944 upon the varied activities of the Department, which are governed by the provisions of the following Acts and Regulations.

ACTS AND REGULATIONS.

Acts:

Health Acts, Slum Reclamation and Housing Acts, Local Government Act, Factories Acts, Police Offences Acts, Melbourne and Geelong Corporation Act, Goods Act, Births Notification Acts, Sale of Horseflesh Act.

Regulations under Health Act:

Registration, Rat Destruction, Hairdressers' Shops, Offensive Trades, Seizure (Claims), Eating House, Camping, General Sanitary, Analysis, Septic Tanks, Cattle Sale Yards, Infectious Diseases, Cleanliness (Food), Food and Drug Standards, Nightsoil, Smoke Abatement, Tobacco Packages, Stream Pollution, Fire Prevention, Building (Tent), Boarding and Lodging Houses.

Other Regulations:

Housing (Standard of Habitation) Regulations, Regulations under the Goods Act.

By-laws and Regulations:

By-laws and Regulations of the Council relating to Places of Amusement, Public Buildings, Dancing Saloons, Fowl Yards, etc., are also administered by the Department.

HOUSING.

Lack of materials and labour continues to hamper progress of all work in relation to housing. Slum Reclamation, as such, is completely at a standstill, and all our efforts have been directed to an attempt to maintain as many houses as possible in a reasonably habitable condition, especially in respect of such essential matters as roofing and sanitary conveniences. Many of the houses which have been the subject of "deferment orders" since 1942 have greatly deteriorated, owing to our inability to have all the necessary repairs and renovations effected, and a certain number of them are approaching a condition when demolition will become necessary. The system of deferments is also unsatisfactory in that it allows those owners, who have shown little or no interest in their properties, to continue to avoid their obligations under the excuse of the scarcity of labour and material.

Houses Dealt with under the Slum Reclamation and Housing Acts.

In continuance of the work as agents for and under the direction of the Housing Commission, 250 inspections and re-inspections for work in progress have been carried out. In view of the difficulties above-mentioned, the number of official reports recorded have been comparatively few. The number of statutory reports submitted to the Commission was twenty (20) as compared with 198 in 1941, the first year of the operation of the Slum Reclamation and Housing Acts. These 20 premises were classified in accordance with the requirements of the Act, ten (10) being included in List "A" requiring demolition of the premises and ten (10) in List "B" requiring compliance with the Standard of Habitation Regulations.

The following table shows the action recommended regarding the houses "reported" and the number of each area.—

TABLE I.

HOUSES REPORTED.

	City	E. Melb.	S. Yarra	Carlton N.	Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition			_	1	3	1	3	_	2	10
Repairs				3	2	3	1		1	10

Notices Issued.

Acting under the instructions of the Housing Commission, notices affecting twenty-eight (28) properties were issued together with copies of the Commission's Declarations in respect of such premises. This involved the preparation and service of thirty (30) Notices, 28 on owners and

two on occupiers. In all cases, whether demolition or repair, deferment was granted on the giving by the owner of an undertaking to effect such urgent repairs as were specified. The nature of the notices issued, together with the areas affected, are set out hereunder in Table II.

TABLE II

NOTICES SERVED

	City	E. Melb.	S. Yarra	Carlton	N.Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition _	_	-		1	3	1	9		2	16-
Repairs		Accommon		2	3	3	1	2	1	12

Compliance with Notices.

Resulting from notices issued, compliance has been effected in 16 instances, 13 premises having been demolished and in three instances the premises having been brought up to the standard required by the Standard of Habitation Regulations. Urgent repairs have also been carried out where necessary at premises where demolitions have been deferred and at premises where repairs have been asked for but concessions have been granted. Thirty-one (31) premises are at present vacant awaiting demolition. Endeavours are being made to have work carried out at the other premises where notices have been issued. The areas in which compliance has been effected are shown in the following table.—

TABLE III.

COMPLIANCE WITH NOTICES

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition		_	_	4	1	_	8	_	_	13
Repairs				_			1	2		3

The following tables set out the number of houses reported, the number of notices served and the number of compliances in the several areas since the coming into operation of the legislation in 1940, since when a total of 637 houses have been inspected in detail and reported to the Housing Commission.

TABLE "A"

HOUSES REPORTED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton	N. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	22		1	158	33	16	189	22	6	447
Repairs		2	2	41	28	36	67	10	4	190

TABLE "B"

NOTICES SERVED SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton N	Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total
Demolition	22		1	125	30	11	139	9	5	342
Repairs		2	2	33	30	33	39	8	5	152"

TABLE "C"

COMPLIANCE WITH NOTICES SINCE MAY, 1940

	City	E. Melb.	S. Yarra	Carlton N	. Carlton	W. Melb.	N. Melb.	K'sington	Flem'ton	Total'
Demolition	6	_	-	98	10	15	79	1		209
Repairs		1	_	15	11	7	14	3	1	52.

In one instance where the owner failed to comply with a direction to remedy defects in his premises, the Commission was forced to invoke the powers of the Housing Act and carry out the work by contract and charge the owner with the cost.

The re-housing of families dispersed as a result of the Commission's orders on the premises has continued on a very restricted scale, and five families, consisting of 12 adults and 22 children from the City area, were re-housed during the year, three of which came from houses where orders were operating, whilst two were families which the Commission classified as selected applicants irrespective of any order on the premises from which they are removed. This now makes a total of 176 families, consisting of 221 adults and 206 children which have been re-housed from the City areas since the commencement of the housing scheme in 1940.

As a means of relieving overcrowding at certain premises, the Commission was able, in 21 instances, to find accommodation for tenants in a number of City boarding and apartment houses.

Housing under the Health Act.

In addition to the work carried out under the Housing Acts, four hundred and thirty-six (436) investigations of various phases of housing such as defective roofs, dampness in walls, defective sanitary fittings, drainage, etc., have been dealt with under the Health Act and 436 Notices were served on the owners of properties to effect urgent repairs in compliance of which repairs were effected in 416 instances and work was in progress at the other 20 premises at the close of the year. Following out the customary practice of keeping records of all demolitions of dwellings undertaken voluntarily by the owners for factory or business extension, eight (8) such instances were reported during the year. Demolitions under the Housing Acts, together with the number above recorded, makes a total of twenty-one (21) premises demolished in the City area during the year and since May 1940, a grand total of 336.

FOOD AND FOOD PREMISES

Regular attention has been paid by the staff to the important work of inspection of all premises where food is manufactured, prepared, stored or exposed for sale; and, in addition to the supervision of food factories, hotels, boarding houses, grocers, greengrocers, butchers, delicatessen, small-goods and confectionery shops inspection was made of 479 eating houses and 264 premises where ice-cream, cordials, etc. are manufactured, all of which have to be registered with the Council annually. These premises generally were found to be well maintained and in conformity with the Health Acts.

In this branch also of our activities, we are confronted with the manpower problem, and the employment of inexperienced personnel renders the work of supervision of these premises much more onerous and exacting, particularly in the inner City districts.

Milk bars throughout the City claim our special attention both with regard to the general cleanliness of the premises, utensils and other equipment used in the preparation of drinks, and particularly to the condition of the glassware and crockery. Fifty-four (54) samples of "drinking" milk were taken at these premises for the purpose of chemical analysis, details of which are reported under the heading of "Food Sampling."

The new regulations relating to the disposal of waste beer have continued to occupy our attention, and it is pleasing to report that the licensees of hotels generally are carrying out the provisions of the regulations satisfactorily.

Throughout the year repairs and renevations were carried out at 60 premises, details of which are shown in the attached summary.

FOOD SAMPLING

In conformity with the requirements of the Health Act regular and systematic collection of food samples for chemical and bacteriological examinations were made.

The total nuumber of samples procured for chemical analysis during the year was 444. The samples consisted of—coffee and chicory 7 (1); vinegar 6 (8); jam 8 (7); cheese 6 (15); pepper 2 (5); coffee 1 (7); butter 10 (—) ice-cream 9 (3); milk 331 (305); tomato sauce 6 (7); dried fruits 10 (10); sausage meat 48 (32). The figures in brackets indicate the number of samples submitted in the previous year.

Compared with the work of 1943, there is an increase of forty-four (44) samples which accords with the direction of Health Committee to extend our sampling activities.

Of the total number of samples submitted, twenty-six (26) or approximately 5.85 per cent., failed to comply with the standard. This number comprised one butter, six ice-cream, 16 milks and three sausage meat. In addition to the three samples of sausage meat, which did not comply with the standard, seven others failed to comply with the requirements of the Food Standards Regulations, not being labelled to show that they contained preservative. The sample of butter showed a slight excess of moisture, and a letter of warning was forwarded to the vendor. The samples of ice-cream were all below standard in their percentage of milk fats and one contained starch contrary to the Regulations. The three samples of sausage meat all contained an excess of preservative. Proceedings instituted against the vendors of the ice-cream samples resulted in fines and costs amounting to £35/12/6 being inflicted, and proceedings instituted against the vendors of the sausage meat for not complying with the standard and for failing to label the packages intimating that they contained preservative, resulted in fines and costs amounting to £73/13/-.

The total number of milk samples procured during the year was 331, involving 93 vendors consisting of 26 dairymen, two producers, 12 house trade dairies and 53 milk bars. Compared with the total for 1943, there is an increase of 26 in the number of samples taken. The number of vendors also shows an increase of 11; this is accounted for by the fact that "house trade" dairies were included in our sampling programme for the year.

Milk bars continue in their popularity with the general public and consequently careful attention has been given to the quality of milk being sold from these premises, and 54 samples were taking during the year. This number is slightly less than that of last year, owing to the fact that in the early part of the year there was a complete ban on the sale of whole milk from these premises and powdered milk was also in short supply.

The number of samples from all sources which complied with the standard was 315, or 95.16 per cent. of the total. Sixteen (16) samples, or 4.83 per cent. did not comply with the standard. Of the samples below standard, eight were below in fatty solids, two below in solids not fat and contained added water, two below in solids not fat with raising of the Freezing Point, one below in total solids and fatty solids, one below in solids not fat and one below in total solids and solids not fat and with added water. One sample, whilst complying with the standard in other respects, contained added water. Thirty (30) samples in all were submitted to the Freezing Point test to determine the presence of water, twenty-four (24) of which passed satisfactorily.

Samples taken from milk carts in the course of delivery numbered 254 as compared with 237 for the previous year. This number consisted of 140 from bulk supplies and 114 from bottled milk. Fifty-four (54) samples of "drinking" milk were obtained from City milk bars, twenty (20) samples from "house trade" dairies and three (3) producers' samples were taken at the point of delivery, one of which failed to comply with the standard.

With regard to the 16 samples found to be below standard, seven (7) were from City milk bars, eight (8) from delivery carts, consisting of four (4) samples from bulk supplies and four (4) samples from bottled milk and one from producers' samples. A letter of warning was forwarded to the vendor in one instance in which the sample was only slightly below standard and proceedings were withdrawn in one instance on the payment of costs amounting to £4/2/-. Proceedings, however, were taken against the vendors of all the other samples found to be below standard and against one of the producers for failing to have his cans properly sealed. Fines and costs amounting to £137/6/- were inflicted.

As was also the case last year, one case was dismissed on the plea of reasonable precautions under the provisions of Section 259 of the Health Act 1928. We regard the provisions as unsatisfactory and would urge that action should be taken to have the section amended and brought into conformity with the Warranty Section (Sec. 268) whereby notice must be given within seven days after service of the summons that the defendant intends to rely on the plea of reasonable precautions and all the facts upon which such plea is based must be stated.

An analysis of the figures shows the average quality of milk per sample as follows.—

	Total Solids	Non-Fats	Fats
All Sources	13.15	8.93	4.22
Bulk Supplies	13.17	8.92	4.25
Bottled Samples	13.00	8.89	4.11
Milk Bars	13.37	9.09	4.28
House Trade Dairies	13.23	8.85	4.38

The following comparative table shows the average quality of milk per sample since 1928; also the percentage of samples which did not comply with the standard.

Year	No. of Samples	Total Solids	Non-Fats	Fats	Percentage of samples below standard
1928	3,90	12.96	8.95	4.01	1.0%
1929	633	12.88	8.89	3.99	3.8%
1930	276	12.90	8.90	4.00	3.6%
1931	289	12.97	9.00	3.97	2.7%
1932	286	12.88	8.89	3.99	2.5%
1933	282	12.95	8.96	3.99	2.4%
1934	281	13.01	8.95	4.06	2.4%
1935	271	13.01	8.90	4.11	5.0%
1936	280	12.92	8.88	4.04	3.5%
1937	265	13.11	8.90	4.21	2.6%
1938	269	13.11	8.97	4.14	5.2%
1939	275	13.38	9.18	4.20	1.99%
1940	279	13.24	8.98	4.26	3.2%
1941	281	13.27	9.03	4.24	2.8%
1942	274	13.18	9.00	4.18	5.8%
1943	305	13.12	8.92	4.20	6.6%
1944	331	13.15	8.93	4.22	4.6%

The following list gives particulars of the number of samples taken and the average quality of milk supplied. It shows that the average quality of the milk was again very good and closely approximates the best averages shown over previous years.

Group "A" represents 14 dairymen (54 per cent. of vendors concerned) from whom seven or more samples were obtained. Group "B" represents five dairymen (27 per cent. of vendors) whose supplies were sampled from four to six times during the year. Group "C" represents five dairymen (19 per cent. of vendors) from whom three or less samples were taken.

SUMMARY OF AVERAGES

Delivery Carts GROUP "A"

(Over six (6) samples) Fourteen vendors

			Fou	rteen	vendors
	Averag	e Quality	per Sam	ple '	Remarks
	No. of	Total			
No.	Samples	Solids	Non-Fats	Fats	
. 1	31	13.3	8.9	4.4	Two samples below standard
2	22 12	13.2 13.4	8.8 9.0	4.4 4.4	Two samples below standard
3 4	10	13.3	9.0	4.3	
5	10	13.1	8.9	4.2	Oue sample below standard
7	29 10	13.0 13.0	8.9 9.0	4.1 4.0	One sample below standard
8	12	12.8	8.8	4.0	
9	10	12.8	8.8 8.9	4.0 4.0	One sample below standard
10	11 22	12.9 12.8	8.8	4.0	One sample below standard
12	14	12.8	8.9	3.9	one sample below standary
13	10 8	12.8 12.8	8.9 8.9	3.9 3.9	
14		12.0			"B"
•				OUP	~
		Over t			ınder seven (7) samples
			Seve	n (7)	vendors
· -	Averag	e Quality	per Samp	ole	
	No. of	Total	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
No.	Samples	Solids	Non-Fats	Fats	
1	6	14.0	9.1	4.9	
2	5	13.3	8.8	4.5	
3	4	13.2 13.1	8.9 8.9	4.3 4.2	
5	4	13.1	9.1	4.1	
6	6	12.9	8.9	4.0	
7	4	12.9	9.0	3.9	
			GR	OUP	"C"
		('.	Three (3)	samp	ples and under)
					vendors
	Averag	e Ouality	per Samp	·	7-4
	No. of	Total	ро шинг		
No.	Samples		Non-Fats	Fats	Remarks
1	2	13.3	8.6	4.7	
2	2	13.0	8.7	4.3	0
3	1 3	13.4 12.8	9.2 8.8	4.2 4.0	One sample below standard
5	2	12.5	8.7	3.8	
					"D"
				Produ	icers
			Two	(2)	vendors
	Average	e Quality	per Samp	ile	Remarks
		Total	pre- outrip		Kemarks
No.	Samples		Non-Fats	Fats	
1	2	14.3	8.8	5.5	Sample below standard
2	1	12.5	8.1	4.4	
		•	an	OTIN	//T399
				OUP	"E"
			"House	Trad	le Dairies"
			Twelve	(12)	vendors
	Average	e Quality	per Samp	le	
	No. of	Total			
No.	Samples		Non-Fats		
12	20	13.2	8.9	4.3	
			an	OUD	//
			4 . 1 .		•• L137
			GR		"F"
			53	Milk	Bars
, , , , , , , , , , , , , , , , , , ,	-		53 "Dri	Milk nking	
· ·			53	Milk nking	Bars
NT.	No. of	Total	53 "Dri per Samp	Milk nking	Bars
No. 53			53 "Dri	Milk nking	Bars

BACTERIOLOGICAL EXAMINATION OF MILK SAMPLES

Following out the customary practice, 267 samples of milk were submitted to the Veteri nary Research Institute, Parkville, for bacteriological examination. The samples consisted of 223 from bottled milk and 44 from bulk supplies.

The usual procedure was followed of obtaining samples from the Companies supplying milk under the Council's subsidised scheme and from carts in the course of delivery in the City proper.

Regular weekly samples were also obtained from a metropolitan hospital.

The result of the examinations discloses a less satisfactory position than formerly as all counts were generally higher, and 79 samples, or 29.5 per cent. of the total, were higher than the standard tentatively accepted as reasonable. Eight (8) samples were found to be infected with streptococcic mastitis, whilst 13 showed evidence of excessive bacterial contamination.

The whole of the samples submitted to the laboratory were from pasteurised milk, all of which were subjected to the phosphatase test, with the following results.—

	No. of	Complied wi	ith	Failed to		
SOURCE	samples	the test	Percentage	comply	Percentage	
All Sources	267	224	84%	43	16%	
Subsidised milk	88	80	91%	8	9%	
Metropolitan hospital	44	42	95.5%	2	4.5%	
Carts in course of delivery and other sources	135	102	76%	33	24%	

Despite the high counts previously mentioned a definite improvement over last year is indicated by the above figures, which indicates that more careful attention has been given by the vendors to the actual operation of pasteurization.

The attached Table "A" gives a comparative summary of the average counts of the different milks, from which it will be seen that the averages of the microscopic and agar plate counts. are higher than shown on the previous returns.

Table "B" gives a comparative summary of the averages for the periods 1940-1944.

BACTERIOLOGICAL EXAMINATIONS OF MILK SAMPLES — 1944 TABLE "A"

COMPARATIVE SUMMARY OF AVERAGE COUNTS OF DIFFERENT MILKS

The Counts give the number of Germs per cubic centimetre of milk.

THE	Couries	Sive one man		P			
Vendor	No. of			Agar Plate		E. coli	Remarks
	Samples	Average	% of sample	es Average – %	6 of samples	in 1 ml.	
		(Logarithmic)	under	(Logarithmic)	under	Percentages	
			1 million	,	50,000		
All Sources	267	240,000	79.3%	100,000	38.1%	-62% +38%	79 letters
						+38%	8 ev. s.
							mastitis 13 ev. excess.
							bacterial
							contamn.
Vendor "A"	45	69,000	97.3%	42,900	59%	 86%	6 letters
Pasteurised		·				+14%	1 ev. s.
							mastitis 1 gen. bac.
							contamn,
Vendor "B"	43	170,000	86.0%	59,000	58.1%	<u>68%</u>	13 letters
Pastcurised	. 13	1, 0,000	0210,0	22,000		+32%	2 ev. excess.
1 Hotelinous						00.00/	bac, contamn.
Vendor "C"	44	290,000	86.3%	160,000	9.2%	93.0%	12 letters 5 ev. s.
Pasteurised						+ 7.0%	mastitis
Metropolitan Hospital							1 gen. bac.
							contamn.
Milk carts in course o	f 135	410,000	68.8%	130,000	29.5%	-42%	51 letters
delivery and other sources	3					+58%	2 ev. s. mastitis
							9 excess.
							bac. contamn.

COMPARATIVE SUMMARY OF BACTE RIOLOGICAL EXAMINATION OF MILK SAMPLES FOR THE YE ARS 1940, 1941, 1942, 1943, 1944

TABLE "B"

	1. Microscopic Coun Percentage of samples showing under 1,000,000					2. Living Germs Percentage of samples showing under 50,000					Percentage of Samples showing absence of E. coli in 1 ml.				
		per	c.c.					per o	c.c.						
	1940	1941	1942	1943	1944	1940	1941	1942	1943	1944	1940	1941	1942	1943	1944
A. Milk bottled in City, pastcurised	97%	92%	95%	98%	97%	88%	56%	82%	67%	59%	90%	90%	74%	81%	86%
at Country depot. B: Milk bottled in City, pasteurised	100%	92%	83%	91%	86%	97%	60%	62%	73%	58%	76%	71%	64%	41%	63%
at Country depot C. Milk delivered in bulk,	95%	81%	7,0%	95%	86%	86%	70%	52%	71%	9%	91%	93%	88%	88%	93%
pasteurised on farm. D. Various Milk Carts	76%	69%	71%	82%	69%	49%	37%	57%	51%	29%	54%	44%	31%	50%	42%

Under present conditions a sample of milk may reasonably be expected to contain less than one million germs per cubic centimeter as shown by direct miscroscopic count (Column 1.), less than 50,000 germs per cubic centimetre capable of growing at blood heat (Column 2.), and absence of bacillus coli which is derived from filth, in one-hundredth part of a milli-litre (Column 3.).

The Table shows what proportion of the samples attained this standard.

SWIMMING BATHS

As in previous years regular samples of the water from the various pools throughout the City were taken during the warm weather and submitted for bacteriological examination. The samples were taken during the afternoon when the pools were in use by good attendances of bathers. The results of these examinations, together with those for free chlorine in the water indicate that the purification plants were being maintained in a satisfactory working condition.

RAT DESTRUCTION

The work of rat destructon has been well maintained throughout the year, notwithstanding the fact that we are still working under difficulties resulting from a depleted staff.

Regular attention has been given to all food premises, shops and warehouses throughout the City proper and, as previously reported, outer areas are visited periodically and as occasion demands.

Considerable publicity was given during the year to the rat menace by the issue of leaflets, and ratepayers were appealed to to co-operate in the destruction of rodents.

A special survey was made in the Kensington-Flemington area in November, synchronising with a campaign conducted by adjacent municipalities. All large firms in that area were communicated with and asked to co-operate in a continuous rat drive during the period, and arrangements were made with the Railway authorities to disinfest the railway embankment between Footscray Road and Maribyrnong River. The river bank from Footscray Road to the Abattoirs was closely investigated and the rat gang also visited a large number of premises, including the offensive trades in the area, during the campaign. A special house-to-house survey was also made in the Flemington district near the boundary of the City of Essendon by a team of inspectors when 800 premises were visited. This survey paid special attention to—

- 1. Condition of garbage bins.
- 2. Accumulation of rubbish likely to harbour rats.
- 3. Condition and situation of fowl yards.
- 4. Litter and food scraps.
- 5. Evidence of rat infestation.

As a result of the survey it was found that on only 15 premises, representing 2 per cent. of those on the area covered, was any evidence of rat infestation found. In 23 instances, or three per cent. garbage bins were unsatisfactory. Accumulation of rubbish likely to harbour rats was found on five premises, and fowl yards not in compliance with the By-laws were observed in 13 instances, or 1.5 per cent. of the premises visited. Notices were served to effect remedies to the conditions found, and on subsquent inspections at a later date it was found that all these notices had been complied with.

Care is exercised to note any unusual conditions indicating sickness among the rat population, and if any evidence is found specimens are submitted for bacteriological examination; but no such evidence was found during the year.

A number of live rats was forwarded to the Research Institute at Parkville for testing the toxicity of a new rat poison, and a number was also supplied to the Bacteriology Department at the University, at the request of the Public Health Department, to determine the classification of fleas found on the rodents.

In addition to the work carried out by means of trapping, gassing and use of dogs, 83,000 poison baits were prepared, of which about 42,000 baits were laid by the rat staff. The policy of providing baits for the use of the ratepayers was continued and their increased demand accounted for about approximately 41,000 baits. The extent of the work of the rat gang is shown in the following table.—

			No. of premises	1 otai
Complaints	Notices under	Premises	where structural work	no. of Rodents
attended to	Rat Regulations	visited	carried out	destroyed
576	56	2380	158	Rats 8019 Mice 209
				8228

The species of rats caught and destroyed during the year is shown in the following table,

which gives a comparison with previous years and shows the differentiation between the subspecies of black rats (prior to 1937 the totals for black and brown rats only were recorded).—

Year	Black Rats Brown Rats Total
1935	3073 3428 6501
1936	4275 4490 8765
\mathbf{M}	Rattus M. Alex. M. Norveg Total
1937	892 2409 4816 8117
1938	957 2379 4708 8044
1939	1090 2065 4252 7407:
1940	923 1620 3933 6576
1941 (924 1510 4172 6606
1942	1034 1648 3298 5980
1943	951 2075 4743 7769
1944	546 1540 5933 8019

REGISTRATIONS

Registrations effected under the Health Act during the year numbered 1576 which shows an increase of 156 in the five-year period 1940-1944. Details, including transfers and other particulars, are shown in the following schedule.—

de-			No. altns.		, nasy
Premises	No.	No. not	repairs or	No. new	No. of.
	Registered	Renewed	Renovns.	Registrations	Transfers
Boarding Houses	711	9	56	41	. 83
Eating Houses	479	12	46	6	139.
Ice Cream and Aerated Waters, etc	264	11	4	16	54 👫
Common Lodging Houses	6			_	 ·
Cattle Sale Yard	1				
Premises where Eggs are Chilled	4		Mindrared	_	
Offensive Trades	111	1	3	2	4
Totals	1576	33	109	65	280

Under the Council's By-laws and Regulations, 31 dancing saloons and four places of pastime were also registered.

Boarding Houses.

There were 717 boarding and lodging houses registered, which is an increase of 33 for the year and constitutes a record for these registrations. The increase results partly from closer surveillance, which, owing to the influx of population, is necessary in order to ensure, as far as possible, that the provisions of the Regulations are complied with and that serious over-crowding is not taking place.

The trafficking in this class of business, mentioned in last year's report, has been checked by the introduction of National Security Regulations requiring the approval of the Commonwealth Treasurer of the sale of such businesses. The result of this is evident from the schedule which shows that only 83 transfers were effected during the year as compared with 143 during 1943.

Notices to effect repairs and renovations were served on the owners of the properties, and the registered proprietors in 25 instances and, in compliance with these and previous notices served, improvements were effected at 56 premises.

Eating Houses.

The number of eating houses registered indicates there is little variation in the number of these premises registered from year to year. There does seem, however, to have developed recently a certain amount of competition to secure these apparently lucrative businesses. This is reflected in the number of transfers effected during the year, 139, which is considerably in excess of anything previously experienced.

Offensive Trades.

In the administration of the Offensive Trades Regulations and the relevant sections of the Health Act many visits of inspection were made. The condition of premises generally were found to be satisfactory, but those associated with the disposal of dead stock and animal offal are still giving cause for grave concern; and, until such times as the manpower difficulty is overcome and the installation of new and additional plant can be carried out, there seems little hope of any improvement.

During the year there were three (3) applications under Section 82 of the Health Act 1928, and consent of Council was granted for the establishment of a Marine Store in Bruce Street, Kensington, for the business of poultry killing, cleaning and dressing in Blackwood Street, North Melbourne, and for the extension and alterations to a wool-scouring and fellmongery establishment in the Kensington area.

The number of offensive trades registered for the year was 111, which are shown under the following classification, which includes two new registrations. One butchers' premises was removed from the list on ceasing to render fat for dripping.



Portion of the Newry Street Health Centre, showing in the foreground, waiting mothers, babies and pre-school children.

At the rear of picture is seen the voluntary helper ready to weigh a baby and record its weight for the Sister who will interview the mother and inspect the baby quietly in the glass-enclosed room on the helper's right. Record cards are passed through the half-open window between the weighing table and the Sister's desk.



The Weighing Corner. The small portable carriers by the side of each chair are to hold the babies' clothes. The carrier is made of washable material and is lined with a fresh piece of tissue paper for each baby. On the right of the picture are seen cupboards in which infants' and self-help toddlers' clothes are displayed.



Baby waiting for a medical examination by the doctor in charge of the Centres.



Baby waiting to be immunized against diphtheria by the doctor in charge of infectious diseases.



A room in the dental unit.

Bone boiling and milling, 1; Fat-extracting or melting, 21; Fellmongery, woolscouring and woolwashing, 14; Flock, shoddy or mungo manufacture, 2; Glue or size factories, 1; Gut cleaning or scraping, 2; Manure works, 2; Marine stores, 10; Poultry killing, cleaning and dressing, 11; Rag picking or sorting, 2; Soap works, 2; Store for skings, hides, hoofs, hair or bones, 46; Boiling down works, 1; Oil boiling, 1; Abattoirs, 1; Refuse Destructor 1; Tip, 1.

HAIRDRESSING SALOONS

Regular inspections of all hairdressing shops have been carried out throughout the various City districts for the purpose of administering the Hairdressers' Shops Regulations 1922 made under the Health Act. The premises generally were found to be well kept and in compliance with the Regulations.

STABLES

Whilst these premises are kept under regular supervision to ensure their general cleanliness special care is exercised during the summer months to combat the fly menace and ensure the regular removal of manure and the cleansing of manure pits. During the year improvements were effected at nine (9) premises.

SMOKE NUISANCE

The smoke and soot problem demands continuous attention. Relatively few complaints were received during the year and it may be assumed that this problem is fairly well under control. Alterations were effected to nine (9) furnaces whilst minor improvements were carried out at several cafes and boarding houses, together with the enforcement of the regular sweeping of all chimneys at these establishments.

SANITARY SERVICES

Temporary sanitary conveniences installed at buildings in course of erection or alteration and at military camps in the City numbered 264 involving approximately 11,700 clearances. These figures are similar to those of the previous year. In addition to the above installations the marshalling grounds for troops taking part in marches through the City were again serviced and this involved 255 clearances. The disposal of nightsoil is being continued at the depot of the Melbourne and Metropolitan Board of Works at Campbellfield.

INVESTIGATIONS

A feature of departmental work is the service afforded to ratepayers in giving advice on the various phases of public health. This service, together with complaints received, involved approximately 1,400 investigations throughout the year. Analysis of these shows that 576 dealt with the rat problem, 426 related to various phases of defective housing, 76 to foodstuffs and food premises, 76 to unsatisfactory garbage bins and refuse, 22 to smoke nuisance, 40 to yards and drainage of premises and 22 to vermin in dwellings, whilst the remainder (162) could be grouped as miscellaneous.

PUBLIC BUILDINGS

Regular supervision has been maintained of all registered dancing saloons and places of pastime under the Council's By-Laws and Regulations, and, in conjunction with the Public Health Department, theatres and other public buildings have been regularly inspected and the provisions of the Regulations governing such places enforced.

SUMMARY OF ROUTINE WORK CARRIED OUT DURING 1944.

No. of complaints received and attended to	1399
Re-inspections for compliance with notices	2109
Fire reports received and attended to	266
Inspections and reinspections under Slum Reclamation and Housing Acts Acts	256
Reports forwarded to Housing Commission	129
Notices served under Slum Reclamation and Housing Acts	28
Specifications forwarded to owners under Slum Reclamation and Housing Acts	12
Inspections and re-inspections made under Health Act	215
No. of specifications forwarded to owners and proprietors under Health Act	87
Inspections of hotels and boarding houses	- 3033
Inspections of common lodging houses	35
Inspections of eating houses	5752
Inspections of ice-cream and aerated water premises	1717
Inspections of factories (where food is manufactured)	1158
Inspections of other food premises	6569
Seizures of foodstuffs (consisting of fish, rabbit in jelly, pearl barley, Rycena, as-	
sorted jam)	6
Inspections of public buildings (day and evening)	757
Inspection of hairdressing saloons	294
Inspections of offensive trades and cattle sale yards	710

Inspections of vacant land	4€
Inspections of vards and refuse	13010
Inspections of stables and manure bins	632
Interviews with property owners, architects, contractors, etc.	3777
Inspections by female staff of premises where females employed	118
Investigations of infectious disease and instructions to householders (scarlet fever	•
188: diphtheria 81; other infectious diseases 72)	341
Investigation of tuberculosis and domiciliary visits	1518
Visits to Health Centres (55) and Midwives (124)	179
Returns of infectious disease furnished to Public Health Department	347
Notifications of infectious disease forwarded to Headmasters	126
Returns of registrations and transfers forwarded to Public Health Department	450 ⁻
No. of Notices received under Births Notification Acts	1602
Plans of new buildings and alterations examined	63.
Notices served to secure the abatement of Nuisances—	•
(a) Defective sanitary conveniences 197	
(b) Defective drainage 41	
(c) Dirty premises and yards 42	
(d) Accumulation of refuse and rubbish 75	
(e) Dirty and defective stables 9	
(f) Other nuisances 200	
(1) Other Hubblices	564
Matters referred to other Departments-City Engineer 27; Building Surveyor 42;	
By-Laws 1: Dog Inspector 7	77
Premises within the City registered by Factories Dept.—Factories 2690; Shops 3617	6307
1 Tellinges within the Ore, regional to	

NEW LEGISLATION

The only new legislation introduced during the year was-Schools Regulations 1943.

PROSECUTIONS

Proceedings were instituted against 57 offenders for contraventions of the Health Acts, Regulations and Council By-Laws. In 21 instances, affecting employes, the cases were withdrawn. In one instance, for selling adulterated milk, the case was dismissed on the plea of reasonable precautions offered by the dairyman. In 35 instances, defendants were convicted and fined as follows.

Nature of Offence	No. of Cases	Fines	Costs
	1.4	£94 0 0	£39 5 0
Selling adulterated milk	2	43 0 0	5 16 6
Selling adulterated sausages	3	43 0 0	3 10 0
Failing to label package of food containing pre-	•		
servative	7	9 10 0	15 6 6
Selling adulterated ice cream	6	19 0 0	16 12 6
Selling adulterated the cream	1	1 0 0	1 1 0
Failing to protect food from flies	1	1 0 0	0
Failing to prevent ingress and egress of rats on			1 1 2
food premises	1	5 0 0	1 1 0
Failing to provide proper garbage receptacles	1	3 0 0	1 1 0
ranning to provide proper garbage restricted	î	3 0 0	1 1 0
Failing to properly seal milk cans	1	1 0 0	1 1 0
Discharging waste matter into street channel			eo2 ± 6
Totals	35	£178 10 0	202 3 0

GENERAL

For yet another year we have experienced all the difficulties attendant upon the abnormal conditions resulting from war activities, and manpower problems, and lack of materials have considerably hampered our activities in the many fields. Our already depleted staff was further reduced by the resignation of Mr. N. Harris, Health Inspector, in the early part of the year.

The additional work imposed upon the entire staff as a result of these limitations has, however, been willingly accepted and cheerfully borne by all concerned. It is, therefore, my privilege to record my sincere appreciation of the loyal co-operation and assistance rendered by the inspectorial, clerical and outdoor staff.

THOS. G. O. JORDAN, M.R.S.I.

Chief Health Inspector

REPORT OF CITY ANALYSTS

Melbourne Analytical Laboratory,
27 William Street, Melbourne,
8th January, 1945.

The Chairman, Health Committee.

City of Melbourne.

Sir,

DII,	
	g the year ended 31st December, 1944, we have bles of Foods and Drugs. The following is a brief vtical Examinations.—
Coffee and Chicory—7 samples	Complied with the standard.
Vinegar—6 samples	Complied with the standard.
Jam-8 samples	Complied with the standard.
Cheese—6 samples	Complied with the standard.
Pepper—2 samples	Complied with the standard.
Coffee—1 sample	Complied with the standard.
Butter—10 samples	Nine complied with the standard; one above in
	its amount of water.
Ice-cream—9 samples	Three complied with the standard; one below in
.	Milk Fat; five below in Milk Fat and contained
75111 000 3.	starch.
Milk—331 samples	315 complied with the standard; eight below in
	Fatty Solids; two below in Solids not Fat and con-
	tained added water; two below in Solids not Fat and Freezing Point (Hortvet) high; one below in
	Total Solids and Fatty Solids; one below in Solids
	not Fat; one below in Total Solids, Solids not Fat,
	and contained added water; one contained added
	water.
Tomato Sauce—6 samples	No adulteration detected.
Dried Fruit—10 samples	No adulteration detected.
Sausage Meat—48 samples	14 contained no sulphur dioxide; one contained a
	trace; others contained respectively 0.4, 0.7, 0.7,
	0.7, 0.8, 0.9, 0.9, 0.9, 1.0, 1.1, 1.3, 1.3, 1.4, 1.4, 1.5,
,	1.7, 1.9, 1.9, 2.1, 2.4, 2.4, 2.5, 2.5, 2.8, 2.8,
	2.9, 2.9, 3.0, 3.0, 3.5, 4.2, 8.1, 13.3 grains per pound.
	No boric acid, saltpetre, nitrite, or excess starch
	detected.
	Yours obediently,

(Signed) DUNN, SON AND STONE,

(Analysts to the City of Melbourne)

REPORT OF BACTERIOLOGICAL EXAMINATIONS

 \mathbf{Z}

The University of Melbourne,

Bacteriology Department,

Melbourne, N.3.

13th February, 1945.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory Melbourne University, for the year 1944.

Diphtheria—A total of 376 swabs were cultured and examined and seven were found to be "positive." One virulence test was carried out and it proved to be "virulent" B. diphtheria.

Scarlet Fever—149 blood plates were examined for the presence of Haemolytic streptococci and 43 were positive, i.e., giving B haemolysis and the test for Lancefield's Group A organisms.

Tuberculosis -Two sputa were examined and both were negative for Tubercle bacilli.

Water—33 specimens of water from Swimming Baths were examined and reported for total count of bacteria and B. coli content. A high standard of bacteriological purity for the water in swimming pools was indicated by the samples.

(Signed) HAROLD A. WOODRUFF, Director

